HAS. H. PHILLIPS CHEMICAL CO.'S Advertisement on Page 3.

Vol. XIX. APRIL, 1898. No. 4.

# Kansas City Medical Index

A Journal of Medicine and Surgery

CIRCULATES IN EVERY STATE AND TERRITORY.

3 E. Fifteenth Street. | EDITED AND PUBLISHED BY HERMAN E. PEARSE, M. D. | Kansas City, Missouri.



COMING SOCIETY MEETINGS Page 4.

# The Committee of Ways and Means

Is the most important one in Congress. The physician, when called upon to treat a case of Typhoid Fever, must resolve himself into a committee of one to devise "ways and means" to combat the disease. Nutrition is of vital moment.

Liquid Peptonoids possesses the following essential qualities AS A FOOD:

1st. Palatability.
2d. All the elements of nutrition.
3d. Pre-digested condition.
4th. Peptogenic potency.
5th. Slightly stimulating effect.
6th. Aseptic state.

Is it any wonder, therefore, that it is a favorite nutriment in Typhoid Fever?

Note:—If an efficient antiseptic remedy is desired **Liquid Peptonoids with Creosote** should be administered, thus furnishing at the same time both food and medicine.

THE ARLINGTON CHEMICAL CO. YONKERS N.Y.

# Kansas City Dental College,

**N. W. Cor. Troost Ave., and Tenth St., KANSAS CITY, MO.**

## FACULTY.

ALTON H. THOMPSON, D. D. S., President.
W. T. STARK, D. D. S., Professor of Prosthetic Dentistry.
C. L. HUNGERFORD, D. D. S., Professor of Operative Dentistry.
J. D. PATTERSON, D. D. S., Professor of Dental Pathology.
A. H. THOMPSON, D. D. S., Professor of Dental Anatomy.
F. W. RATHBONE, M. D., Professor of Materia Medica.
J. D. GRIFFITH, M. D., Professor of Clinical and Oral Surgery.
WALTER S. WHEELER, B. S., M. D., Professor of General and Descriptive Anatomy.
GILBERT B. MORRISON, Professor of Chemistry and Physics.
ROBERT T. SLOAN, A. M., M. D., Professor of Physiology and Histology.

S. H. RAGAN, M. D., Demonstrator of Anatomy.
W. L. CAMPBELL, D. D. S., Assistant to the Chair of Prosthetic Dentistry
DR. J. G. HOLLINGSWORTH, Resident Demonstrator.
GEO. F. HAUSER, D. D. S., Instructor in Technics.

## CLINICAL DEMONSTRATORS.

DR. R. R. BUCHANAN,
DR. L. C. WASSON,
DR. W. H. SHULZE,
DR. C. E. ESTERLY,
DR. F. O. HETTRICK.
DR. J. M. AUSTIN,
DR. A. J. McDONALD,
DR. J. P. ROOT,
DR. S. B. PREVOST,
DR. JEROME STUART.

## FEES.

Matriculation (paid but once).....$ 5.00
Diploma ..... 20.00
Tuition, (including dissection) .....$100 00
For further particulars, address,
J. D. PATTERSON, D. D. S.; SEC.
Keith & Perry Building, Kansas City, Mo.

The Annual Sessions of this School Commence on the First Day of October and continue for six months.

---

# Constipation.

Constipation is the "bete noir" of the home; regarded by physicians as being probably the most potent factor in causing and inviting other diseases. A remedy which will help the doctor to educate the members of the families under his care, in the direction of a regular habit as regards the evacuation of the bowels, is desirable. "Syrup of Figs," as furnished to the medical profession and to the public, seems to the practising physician to be almost an ideal domestic or family laxative.

The California Fig Syrup Co. have frankly announced that their product, "Syrup of Figs," has, as its most energetic laxative agent, the active principle of Alexandria senna, which is the best senna in the world. "Syrup of Figs" is simple, safe, and reliable as a laxative; does not irritate or debilitate, does not disturb digestion, and favors the regularity of habit, so much to be desired.

*It is particularly to be recommended for ladies and children, although helpful in all cases where a laxative is indicated.*

**SPECIAL INVESTIGATION IS EARNESTLY INVITED.**

"Syrup of Figs" is never sold in bulk. It retails at fifty cents a bottle, and the name of "Syrup of Figs," as well as the name of the "California Fig Syrup Co.," is printed on the wrappers and labels of every bottle.

**CALIFORNIA FIG SYRUP CO.**, SAN FRANCISCO, Cal.; LOUISVILLE, Ky.; NEW YORK, N.Y.

## CONTENTS.

ORIGINAL ARTICLES.

Acute Appendicitis—By C. B. Hardin, M. D., Kansas City, Mo. ... 97
Serum Diagnosis of Typhoid Fever—By I. J. Wolf, M. D., Kansas City, Mo. ... 101
The History and Diagnosis of a Case of Progressive Pernicious Anæmia, Complicated by Pyæmia—By C. W. Dulin, M. D., Kansas City, Mo. 107
House Disinfection—By E. Von Quast, M. D., Kansas City, Mo. ... 109
Abnormal Situation of the Anus—By D. W. Basham, M. D., Neal, Kans. ... 110

COMMUNICATIONS.

Appendicitis with Perforation Under Twenty-four Hours ... 110

SELECTIONS.

Something Right About Catgut ... 111
The Treatment of Hemorrhoids by Ligature, by Injection, and by the Clamp and Cautery ... 113

EDITORIAL.

The American Medical Association Meeting next June ... 117

EDITORIAL NOTES.

Methelene Blue ... 118
Baby Murder in New York ... 118
Another Case of Bombast ... 118
Rubber Bags for Intestinal Suture ... 118
Retroflexion of the Uterus ... 119

CHALK TALK.

The Triangle Bandage ... 119
The Four-Tailed Bandage ... 120

SOCIETY PROCEEDINGS.

Jackson County Medical Society ... 121
New York Academy of Medicine ... 124

BOOK TALK.

Twentieth Century Practice ... 125

LITTLE ITEMS.

Little Items ... 125

READING NOTICES.

Reading Notices ... 126

# SOCIETY CALENDAR.

**Secretaries of Societies: Please report your meetings for these pages.**

American Medical Association, Denver, June 7 to 10.

American Association Military Surgeons, Kansas City, June 1 to 5.

Western Surgical and Gynecological Association, Omaha, Dec. 28 to 29.

Missouri State Medical Association, Excelsior Springs, May 24, 25, 26, 1898.

Kansas State Medical Association, Topeka, May 4, 5 and 6, 1898.

Iowa State Medical Association, Des Moines, May, 1898.

Central District, Sedalia, Mo., postponed to May 5, 1898.

Southeast Kansas District, Parsons, Ks., first Tuesday in March, June, September, December—migratory.

Golden Belt District, Abilene, Ks., May, 1898.

Hogden Medical Association, meets first Thursday in April, July, October, January—migratory.

# COMING SOCIETY MEETINGS.

Henry County Medical Society, at Clinton, Mo., April 7th.

Central District Medical Society, postponed to May 5, 1898.

Jackson County Medical Society, of Kansas City, second and fourth Thursday evenings, 916 Walnut Street.

Academy of Medicine, Kansas City, every Saturday evening, Midland Hotel.

Southeast Kansas District, Parsons, Ks., May 31, 1898.

Hogden Medical Association, Rich Hill, Mo., April 7, 1898.

# A UNIVERSAL REMEDY.

**OR AS NEAR AS ANY KNOWN SPECIAL PREPARATION.**

## "H. V. C."

### HAYDEN'S VIBURNUM COMPOUND.

For the relief of pain and the most reliable and safest

## ANTISPASMODIC,

known to the Medical Profession. Highly recommended in the

### *AILMENTS OF WOMEN AND CHILDREN,*

Particularly in cases of *AMENORRHOEA, DYSMENORRHOEA, MENORRHAGIA, DANGEROUS FLOODING, THREATENED ABORTION, STERILITY, THE MENOPAUSE,* and in all stages of labor it is indispensable.

"H. V. C." has been in the hands of the Profession for thirty-two years with great approbation. Perfectly safe in any and all cases and can be relied upon in emergencies

Physicians should be assured of the genuine and that no substitute is employed. Send for our special illustrated hand book, free.

**NEW YORK PHARMACUETICAL COMPANY,**

**Sole Manufacturers of Hayden's Viburnum Compound.**

**BEDFORD SPRINGS, MASS.**

---

## The Up-to-Date Poultice and Surgical Dressing

**The ONE indication for its use is** INFLAMMATION **SUPERFICIAL OR DEEP.**

**A whitish paste, about the color and consistency of thin putty; should be spread on the skin over the affected part as thick as a silver dollar, covered with cotton and bandage and allowed to remain till nearly dry, 12 to 48 hours.**

FORMULA. Glycerine, Boric Acid, Salicylic Acid, Iron Carbonate, Peppermint, Gaultheria, Eucalyptus and Iodine, combined with the base, de-hydrated oxide of the Silicate of Alumina and Magnesia.

HYGROSCOPIC
ANTISEPTIC
ANODYNE
NUTRIENT
NON-IRRITATING
NON-POISONOUS

# ANTIPHLOGISTINE

Local, Prophylactic and Curative

***Positively the most plausible and efficient means yet devised for the successful treatment of***

| | | | | | |
|---|---|---|---|---|---|
| Pneumonia, | Varicose Ulcers, | Tumors, | Inflamed Glands, | Boils, | Felons, |
| Bronchitis, | Pelvic Inflammation, | Peritonitis, | Buboes, | Erysipelas, | Sprains, |
| Pleurisy, | Poisoned Wounds, | Chronic Ulcers, | Tonsilitis, | Periostitis, | Dysmenorrhœa, |
| Osteitis, | Inflamed Breasts, | Orchitis, | Piles (External), | Burns, | |

***And all cases where inflammation or congestion is a factor.***

**Put up in ½, 1 and 2-pound cans. Retail price, 50c, 75c and $1.25 respectively. Upon receipt of 25c (to pay expressage) from any practising physician, a 1-pound sample can, with literature, will be sent free.**

**PROPRIETOR: THE DENVER CHEMICAL M'F'G CO., DENVER, COLORADO.**

CELERINA not only removes fatigue of both brain and body, but it is also of the greatest service to singers and speakers, for, whilst bracing the nerves, it strengthens the voice.

---

A sample bottle will be sent free to any physician who desires to test it, if he pays the express charges.

---

***RIO CHEMICAL CO., St. Louis, Mo., U. S. A.***

# Oak Lawn Private Retreat for the Insane.

## JACKSONVILLE, ILL.

Twenty-five years in successful operation, beautiful and retired. Extensive grounds, modern facilities for the reception of Acute and Chronic cases of Mental Diseases. Is arranged and conducted according to the best ideas of Modern Science.

This Institution is under the exclusive medical control of Frank Parsons Norbury, M. D., late of the Illinois Central Hospital for the Insane, formerly Resident Physician to the Pennsylvania Institution for Feeble-minded Children.

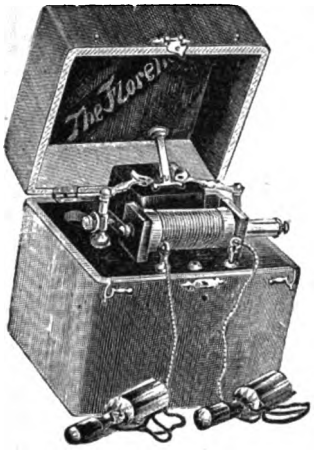
Address,

**FRANK PARSONS NORBURY, M. D.,**

**JACKSONVILLE, ILLINOIS.**

---

**DANIEL HUGHES, Prest.**
**Telephone 2303.**




# Physicians' Supply Co.

**Manufacturers and Wholesale Dealers in**

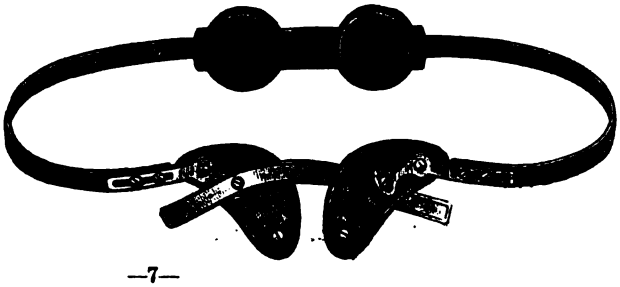
Surgical and Dental Instruments, Bandages, Appliances, Medicines, Deformity Apparatus and Physicians' Supplies of all Kinds.

Trusses and Crutches, Elastic Stockings and Abdominal Supporters.

**916 WALNUT ST.,**

**Opposite Postoffice.**

**Kansas City, Mo.**



# THE

# Medico-Chirurgical College,

## OF KANSAS CITY, KAS.

Second annual session begins September 14th, 1898, and continues six months.

### FACULTY:

STEPHEN A. DUNHAM, M. D., President,
Professor of the Principles and Practice of Medicine and Clinical Medicines.

ERNEST J. LUTZ, M. D., Dean,
Professor of Pathology and Bacteriology.

J. M. BANISTER, A. B., M. D., Major and Surgeon U. S. A.,
Professor of Surgical Pathology.

GEORGE M. GRAY, M. D., Vice-President,
Professor of the Principles and Practice of Surgery and Clinical Surgery.

JAMES L. HARRINGTON, M. D., Secretary,
Professor of Dermatology and Genito-Urinary Diseases.

MILO BUEL WARD, A. M., M. D.,
Professor of Gynecology and Abdominal Surgery.

GEORGE O. COFFIN, M. D,
Professor of Clinical and Operative Surgery.

J. A. LANE, M. D.,
Professor of the Principles and Practice of Surgery.

HENRY M. DOWNS, M. D.,
Professor of Obstetrics.

ALBERT J. WELSCH, M. D.,
Professor of Anatomy.

JULIUS BRUEHL, M. D.,
Professor of Clinical Medicine.

ROBERT O. CROSS, M. D.,
Professor of Physiology.

PARK L. McDONALD, M. D.,
Professor of Diseases of Children.

N. J. PETTIJOHN, M. D.,
Professor of Railway Surgery.

HON. J. B. SCROGGS,
Professor of Medical Jurisprudence.

JOHN M. FRANKENBURGER, M. D.,
Professor of Physical Diagnosis.

E. VICTOR WEDDING, B. Sc., M. D.,
Professor of Materia Medica and Therapeutics.

JOSEPH S. LURIE, Ph. G.,
Professor of Chemistry and Toxicology.

JAMES FRANKLIN WOOD, M. D.,
Professor of Ophthalmology and Otology.

DAVID F. RODGERS, M. D.,
Professor of Nervous and Mental Diseases.

J. E. MOSES, M. D.,
Professor of Applied Therapeutics.

HOWARD M. CORNELL, M. D.,
Lecturer on Minor Surgery and Surgical Dressing.

D. WALTON HALL, M. D,
Lecturer on Diseases of Nose and Throat.

HON. ROBERT E. MORRIS,
Lecturer on Medical Jurisprudence.

GEORGE F. BERRY, M. D.,
Lecturer on Histology and Bacteriology.

J. V. KINYOUN, M. D.,
Lecturer on State Medicine and Hygiene.

HOWARD HILL, M. D.,
Demonstrator of Anatomy,

J. W. MILLER, M. D.,
Assistant Demonstrator of Anatomy.

B. L. EASTMAN, M. D.,
Lecturer on Pathology and Histology.

W. F. LIPPITT, M. D, Captain and Assistant Surgeon U. S. A.,
Assistant to Chair of Ophthalmology and Otology.

JOHN T. FINEGAN, M. D.,
Assistant Demonstrator of Anatomy.

***Three-Year Graded Course--A Part Completed Each Year.***

Lecture and recitation systems of instruction. Hospital and clinical facilities unusually large. Bedside instruction in Medicine, Surgery and Gynecology.

***St. Margaret's Hospital, the Largest in the West.***

For Announcement and other information, address

***E. J. LUTZ, M. D., Dean,***
638 Minnesota Ave., Kansas City, Kas.

***J. L. HARRINGTON, M. D., Sec'y,***
18th and Locust Sts., Kansas City, Mo.

# Kansas City Medical College,

**ESTABLISHED 1869.**

**NEW BUILDING. NEW AND WELL EQUIPPED LABORATORIES.**

The Thirtieth annual session begins September 15th, 1898, and continues twenty-six weeks.

**—FACULTY:—**

SIMEON S. TODD, M. D.,
Emeritus Professor of Obstetrics and Diseases of Women.

EDWARD W. SCHAUFFLER, A. M., M. D.
Professor of the Principles and Practice of Medicine and Clinical Medicine.

JEFFERSON D. GRIFFITH, M. D.
Professor of the Principles and Practice of Surgery and Clinical Surgery.

JOHN H. VAN EMAN, M. D.,
Professor of Diseases of Women.

JOHN H. THOMPSON, M. D.,
Professor of Ophthalmology and Otology.

THEO. S. CASE, A. M., M. D., Ph. D.
Professor of Chemistry and Hygiene.

WILLIAM C. TYREE, M. D.,
Professor of Ophthalmology and Otology and of Clinical Ophthalmology and Otology.

JOSEPH SHARP, M. D.,
Professor of Principles and Practice of Medicine and Clinical Medicine.

ANDREW L. FULTON, M. D.
Professor of Operative Surgery and Clinical Surgery.

CHARLES H. LESTER, M. D.,
Professor of Diseases of Children.

HENRY O. HANAWALT, M. D.,
Professor of Diseases of the Nervous System.

J. FAIRBAIRN BINNIE, A. M., M. D., C. M.
Professor of Surgical Pathology and Clinical Surgery.

GEORGE C. MOSHER, M. D.,
Professor of Obstetrics.

ROBERT T. SLOAN, A. M., M. D.,
Professor of Physiology.

HERMAN E. PEARSE, M. D.
Professor of Anatomy.

THOMAS J. BEATTIE, M. D.
Clinical Professor of Gynæcology.

CHARLES E. CLARK, M. D.,
Clinical Professor of Laryngology.

ALBERT H. CORDIER, M. D.,
Professor of Abdominal Surgery.

FRANKLIN E. MURPHY, M. D.,
Professor of Materia Medica, Therapeutics and Physical Diagnosis

WM. FRICK, M. D.,
Clinical Lecturer on Dermatology.

HON. ALEXANDER NEW, B. S.,
Lecturer on Medical Jurisprudence.

BRUMMELL JONES, M. D.,
Lecturer on Applied Therapeutics.

EDWARD G. BLAIR, A. B., M. D.,
Instructor in Histology and Pathology.

JUNIUS A. RAWLINGS, M. D.,
Lecturer on Embryology and Demonstrator of Obstetrics.

THOMAS B. THRUSH, M. D.,
Assistant to Chair of Anatomy.

EDWARD H. THRAILKILL, M. D.,
Instructor in Bandaging and Demonstrator of Anatomy.

BERTAN H. WHEELER, M. D.,
FRANK J. IUEN, M. D.,
HARRY L. HIBBARD, M. D.,
Demonstrators of Anatomy.

WILLIAM T. WHITE, M. D.,
Demonstrator of Histology.

ORRIN H. PARKER, M. D., Ph. G.
Demonstrator of Chemistry.

KIRK C. McKINNEY, M. D.,
Prosector.

## Three-Year Graded Course—A Part Completed in Each Year.

Lecture and recitation systems of instruction. Hospital and clinical facilities unusually large. Bedside instruction in Medicine, Surgery and Gynæcology.

**St. Joseph's Hospital, the Largest in the City, One Square from College Building.**

Post-Graduate Courses of Five and Ten Weeks.

For Announcement and other information address

J. D. GRIFFITH, M. D.,
Dean.

FRANKLIN E. MURPHY, M. D.,
Secretary.

# University Medical College,

## OF KANSAS CITY, MO.

### *911 AND 913 EAST TENTH STREET.*

**College Opens September 14th, 1897, and continues Six Months.**

**FACULTY:**

H. F. HEREFORD, M. D.,.....Rialto Building.
Emeritus Professor of Obstetrics.

JOHN R. SNELL, M. D.,..... 1124 Main Street.
Emeritus Professor of Practice.

R. R. HUNTER, M.D., Ph.D...College Building.
Emeritus Professor of Chemistry.

J. M. ALLEN, A. B., M. D., Pres...Liberty, Mo.
Professor of the Principles and Practice of Medicine.

GEO. HALLEY, M. D..... ....Ridge Building.
Professor of the Principles and Practice of Surgery, Clinical and Operative Surgery.

JAMES P. JACKSON, M. D.....1506 E. 8th St.
Professor of the Principles and Practice of Surgery.

FLAVEL B. TIFFANY, M. D.,..1235 Grand Av.
Professor of Didactics and Clinical Opthalmology and Otology.

CHARLES W. ADAMS, A.M., M.D., Ridge Bldg
Professor of Diseases of Women.

GEORGE W. DAVIS, M. D...Journal Building.
Professor of Genito-urinary, Venereal and Skin Diseases.

JAMES E. LOGAN, M. D.....1210 Wyandotte.
Professor of Diseases of the Nose, Throat and Chest.

ROBERT L. GREENE, M. D...College Building
Professor of General Descriptive and Surgical Anatomy and Orthopœdic Surgery.

JABEZ N. JACKSON, A.M., M.D...Rialto Bldg.
Professor of Anatomy and adjunct Professor of Surgery.

C. F. WAINRIGHT, M. D., Dean, Altman Bldg
Professor of Clinical Medicine and Physical Diagnosis.

JOHN PUNTON, M. D.....Altman Building.
Professor of Mental and Nervous Diseases.

S. C. JAMES, M. D.....Times Building,
Professor of Practice of Medicine.

S. G. GANT, M. D., Treasurer and Curator, Rialto Building.
Professor of Rectal and Intestinal Surgery.

BLENCOE E. FRYER, M. D.....9th and Cherry.
Professor of Pathology and Professor of Clinical Ophthalmology and Otology at the City Hospital.

A. M. WILSON, A. M., M. D..... 908 Main St.
Assistant Professor of the Principles and Practice of Medicine.

E. A. RITTER, M. D.....Altman Building.
Professor of Obstetrics.

W. F. KUHN, A. M., M. D..... ....1103 Main St.
Professor of Physiology.

THEODORE W. SCHAEFER, M. D....908 Main.
Professor of Chemistry and Latin.

ALBERT L. BERGER, A. M., LL. B., Kansas City, Kansas.
Professor of Medical Jurisprudence.

JOHN WILSON, M. D..... .....504 Hall Bldg.
Professor of Hygiene.

CLAY S. MERRIMAN, M. D....2511 Forest Av.
Professor of Diseases of Children.

V. W. GAYLE, M. D.....1103 Main St.
Professor of Materia Medica and Therapeutics.

WILLIS P. KING, M. D...Mo. Pacific Hospital.
Professor of Railway Surgery.

J. P. KASTER, M. D., A.T.S.F. R'way Hospital.
Associate Professor of Railway Surgery.

LEON ROSENWALD, M. D.....Rialto Bldg.
Professor of Histology and Microscopy.

I. J. WOLF, M. D.... .....Rialto Building.
Professor of Bacteriology.

W. F. FAIRBANKS, M. D....Armourdale, Kas.
Adjunct Professor of Physiology.

T. C. PROCTOR, M. D.... .....Rialto Building.
Demonstrator of Histology and Microscopy and Pathologist to the Chair of Surgery.

CHET. McDONALD, M. D.....Rialto Building.
Assistant to the Chair of Practice.

RALPH J. BROWN, M.D.... Altman Building.
Adjunct Professor of Materia Medica and Therapeutics

HENRY ALBRIGHT, M. D..... City Hospital.
Lecturer on Anesthetics.

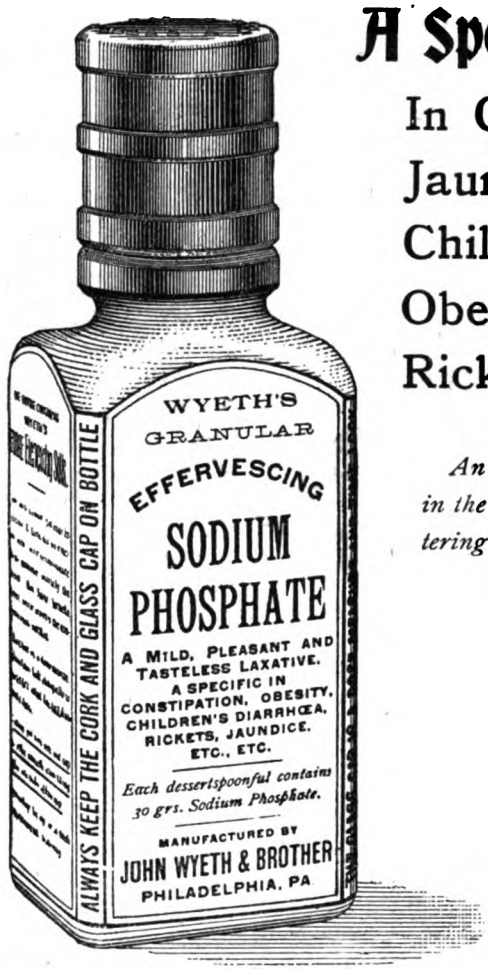
*CHARLES E. WILSON, M. D.... 908 Main St.
J. P. KASTER, M.D....A.T.S.F.R'way Hospital
B. C. HYDE, A. B., M. D.....Nelson Building.
*W. J. FRICK, M. D.....908 Main St.
*L. W. LUSCHER, M. D.....Masonic Building.
G. W. GROVE, M. D.....Rialto Building.
*J. H. AUSTIN, M. D.... ..... .....912 Walnut.
*B. A. LIEBERMAN, M. D.... 1210 Wyandotte.
H. F. MATHER, M. D.... ....Altman Building.
Demonstrators of Anatomy.
*Clinical Assistants to the Chair of Surgery.

**Graded Three Years Course.** Every facility for Practical Study. Clinical advantages unsurpassed by any Western College. For Catalogue or further particulars, apply to

**C. F. WAINRIGHT, M. D., Dean, [OR] JOHN PUNTON, M. D., Sec'y,**
**Altman Building, KANSAS CITY, MO.**

# Wyeth's Granular Effervescing
# SODIUM PHOSPHATE.

**A Mild, Pleasant and Tasteless Laxative.**




## A Specific

**In Constipation,**
**Jaundice,**
**Children's Diarrhœa,**
**Obesity,**
**Rickets, Etc., Etc.**

*An old and Invaluable remedy offered in the most desirable form for administering.*

**WRITE FOR LITERATURE.**

**We also offer as Effervescing Compounds the following: Headache Salts (Caf-Acetan), Aperient, Bromides Modified, Caffeine Hydrobromate, Magnesium Citrate, Magnesian Aperient, Potassium Bicarbonate, Potassium Citrate, Sodium Bicarbonate, Seidlitz Mixture and Vichy.**

**KINDLY SPECIFY "WYETH'S" WHEN ORDERING.**

## John Wyeth & Brother, Philadelphia.

# COLLEGE

—OF—

# Physicians and Surgeons,

## OF KANSAS CITY, KANSAS.

**Medical Department of the Kansas City University.**

## FACULTY.

### D. S. STEPHENS, Chancellor.

**GENERAL SUBJECTS.**

P. H. Hughes, A. M., M. D., Phillip C. Palmer, M.D.—Professors of Principles and Practice of Surgery and Clinical Surgery

S. S. Glasscock, M. D., John A. Mitchell, M. D.—Professors of Principles and Practice of Medicine and Clinical Medicine.

E. M. Hetherington, Ph. G., M. D., Zachariah Nason, M. D.—Professors of Obstetrics.

John Troutman, M. D.—Professor of Physiology and Electro Therapy.

John T. Mitchell, A. M., M. D.—Professor of General Descriptive Anatomy.

Katharine Barry Richardson, Ph. M., M. D.—Professor of Visceral Anatomy.

J. E. Moses, M. D.—Professor of Materia Medica and Therapeutics.

V. L. Todd, M. D.—Professor of Chemistry.

**SPECIAL SUBJECTS.**

J. W. May, M. D., Dean—Professor of diseases of the Eye and Ear.

J. M. Thompson, A. M., M. D.—Professor of Dermatology.

S. Ingleby Harrison, M. D.—Professor of diseases of Women and Abdominal Surgery.

J. L. B. Fager, M. D.—Professor of Pathology and Bacteriology.

John W. Kyger, M. D.—Professor of diseases of Children and Infant Feeding.

Herbert A. Longan, M. D.—Professor of Operative Surgery and Surgical Dressing.

J. Herbert Smith, M. D.—Professor of Hygiene and State Medicine and Chief Demonstrator of Anatomy.

C. M. Stemen A. M., M. D.—Professor of Genito-Urinary Surgery.

R. A. Roberts, A. M., M. D.—Professor of diseases of the Rectum, Histology and Microscopy.

Wm. Clarence Boeker, M. D.—Professor of diseases of the Eye, Ear, Nose and Throat.

J. H. Mooney, A. M., M. D.—Professor of Clinical and Operative Gynæcology.

Hon. W. Harry Brown—Professor of Forensic Medicine.

J. T. Axtell, M. D.—Professor of Orthopedic Surgery.

Thomas L. Bennett, M. D.—Professor of Anæsthesia.

M. P. Sexton, M. D.—Professor of diseases of the Mind and Nervous System.

R. C. Lowman, M. D.—Professor of Physical Diagnosis,

**LECTURERS, DEMONSTRATORS, ETC.**

H. E. Smith, M. D.—Lecturer on Physiology.

William E. Stemen, M. D.—Lecturer on Osteology and Syndesmology.

H. I. Parr, D. D. S.—Lecturer on Dental Surgery.

Edwin Locke, A. M., D. D.—Instructor in Latin.

Colin Mackenzie, M. D.—Demonstrator of Chemistry and Curator of Chemical Laboratory.

C. Allison Foulks, Ph. M., M. D.—Demonstrator of Histology and Curator of the Histological Laboratory.

Howard M. Cornell, M. D., Lot F. Mabie, M. D.—Demonstrators of Anatomy.

Ed. C. Huntsman—Janitor.

## FEES.

| | |
|---|---|
| Matriculation (paid but once) | $ 5 00 |
| **FIRST YEAR.** | |
| General Ticket | 50 00 |
| The same to wives, sons and daughters of physicians | 30 00 |
| The same to wives, sons and daughters of the clergy | 30 00 |
| Laboratory Ticket (Chemical) | 5 00 |
| Final examination fee for this year | 5 00 |
| " " " " 2nd " | 10 00 |
| **THIRD YEAR.** | |
| General Ticket | $ 40 00 |
| The same to graduates of reputable colleges | 25 00 |
| If first and second years have been taken in this college | 30 00 |
| If second year only has been taken in this college | 40 00 |
| Laboratory ticket (Bacteriology) | 5 00 |
| Final examination fee for this year | 25 00 |
| If second year has been taken in this college | 20 00 |
| If first and second years have been taken in this college | 15 00 |
| Hospital Ticket | 5 00 |
| Scholarship (covers general tickets only) | 100 00 |

Clinical advantages of the College are first-class; besides a free dispensary each day, the College has access to Bethany Hospital, thoroughly equipped, self-sustaining, filled with patients, and students have access to St. Margaret's and all the Hospitals in the City.

**DR. J. W. MAY, Dean, Kansas City, Kansas, or**
**DR. E. M. HETHERINGTON, Gen. Sec., Kansas City, Mo.**

# IN CATARRHAL HYPERSECRETION

# BLENNOSTASINE

## WILL GIVE PROMPT RESULTS.

### *In Acute Coryza*

One grain doses given every half-hour will speedily control the mucous discharge. In most cases the attack may be cured in from 12 to 14 hours.

### *In Laryngeal and Bronchial Colds*

The congestion is diminished in a remarkably short time. The attacks may be completely aborted with Blennostasine. It is superior to Belladonna and is non-toxic.

### *In Chronic Nasal Catarrh*

It is advisable to give larger doses—from three to five grains every six hours or until the physiological effects are obtained. No unpleasant symptoms are observed and the result is excellent, the congestion of the mucous membrane being at once relieved.

### *In Asthma and Paroxysmal Sneezing*

The excessive mucous secretions are arrested and the sneezing ceases. Accumulations of mucous at night are prevented by a five grain dose administered at bedtime.

**Blennostastine is best given in pilular form; 1, 3 and 5 grain pills, Gelatine Coated, are supplied.**

***Samples and Literature free on request.***

***McKESSON & ROBBINS, - - New York.***

## A Remedy in Nervous Disorders when Characterized by Melancholia.
## —Mode of Exhibition.—

The "Reference Book of Practical Therapeutics," by Frank P. Foster, M. D., Editor of *The New York Medical Journal*, which has recently been issued by D. Appleton Co., of New York City, contains an article of which the following is an excerpt, which we feel expresses the consensus of medical opinion as adduced by actual results: "Antikamnia is an American preparation that has come into extensive use as an analgetic and antipyretic. It is a white, crystalline, odorless powder, having a slightly aromatic taste, soluble in hot water, almost insoluble in cold water, but more fully soluble in alcohol.

* * * * * *

"As an antipyretic it acts rather more slowly than antipyrine or acetanilide, but efficiently, and it has the advantage of being free, or almost free from any depressing effect on the heart. Some observers even think that it exerts a sustaining action on the circulation. As an analgetic it is characterized by promptness of action and freedom from the disagreeable effects of the narcotics. It has been much used, and with very favorable results in neuralgia, influenza and various nervous disorders characterized by melancholia. The dose of antikamnia is from three to ten grains, and it is most conveniently given in the form of tablets."

We may add, that the best vehicles, in our experience, for the exhibition of antikamnia are Simple Elixir, Adjuvant Elixir or Aromatic Elixir, as also brandy, wine or whiskey. It can also be readily given in cachets or capsules, but preferably tablets, as well as dry on the tongue in powder form, followed by a swallow of water. When dispensed in cachets or capsules it should be put into them dry. Antikamnia tablets should be crushed when very prompt effect is desired and patients should always be so instructed. The conditions of the stomach frequently present unfavorable solvent influences and they can be thus overcome.

—*Notes New Pharm. Products.*

**In Pneumonia where there is Restlessness.**

℞ Antikamnia (Genuine)..... ʒ ij
Tinct. Digitalis..... ʒ ss
Syrup Doveri..... ʒ iij
Mx. Sig.:—Teaspoonful every 3 to 6 hours.

**In Painful Dysmenorrhœa.**

℞ Antikamnia (Genuine)..... ʒ j
Brom. Potass..... ʒ ij
Elix. Aurantii..... ʒ ij
Mx. Sig.:—One or two teaspoonfuls every hour in water.—*Dunglison's Clinical Record.*

# THE GREAT FACT IN MODERN MEDICINE:

*"The Blood is the Life,"*
*And Where Nature fails to make Good Blood,*
*WE CAN INTRODUCE IT.*

BOVININE is Bovine Blood Unaltered from the Arteries of the Bullock;
The Universal Auxiliary of Modern Medicine and Surgery,
and the TRUE "ANTITOXIN" of Healthy Nature.

---

In the more enlightened progress of Modern Medicine, "Blood-letting" has given place to Blood-*getting*.

Aye! Get Good Blood—but How? Not by the Alimentary Process. It has already failed to do its work (else the patient would not be sick); and in acute disease must not even be allowed to do the work it can. Stimulate as you will, the whole sum of the patient's alimentary power when fully forced into play, is unable to keep up the nourishing and supporting contents of the blood. There is absolutely but one thing to do; and, thank God, that can be done, usually with success, as ten-thousand-fold experience has proved. That one thing is this: where Nature fails to PRODUCE good and sufficient Blood, WE CAN INTRODUCE IT from the arteries of the sturdy bullock, by the medium of BOVININE.

The vital activity of this living blood conserve rests on no man's assertion: it speaks for itself, to every properly equipped physician who will test its properties microscopically, physically, or therapeutically.

*TRY IT IN PRACTICE.*

***TRY it*** in ***Anæmia,*** measuring the increase of red cells and hæmaglobin in the blood as you proceed, together with the improving strength and functions of your patient.

***Try it*** in ***Consumption,*** with the same tests from week to week.

***Try it*** in ***Dyspepsia*** or Malnutrition of young or old, and watch the recuperation of the paralysed alimentary powers.

***Try it*** in ***Intestinal*** or gastric irritation, inflammation, or ulceration, that inhibits food itself, and witness the nourishing, supporting and healing work done entirely by absorption, without the slightest functional labor or irritation; even in the most delicate and critical conditions, such as Typhoid Fever and other dangerous gastro-intestinal diseases, Cholera Infantum, Marasmus, Diarrhœa, Dysentery, etc.

***Try it per rectum,*** when the stomach is entirely unavailable or inadequate.

***Try it*** by ***subcutaneous*** injection, when collapse calls for instantaneous blood supply—so much better than blood-*dilution!*

***Try it*** on ***Chronic Ulceration,*** in connection with your antiseptic and stimulating treatment (which affords no nourishment) and prove the certainty and power of topical blood nutrition, abolishing pus, stench, and PAIN, and healing with magical rapidity and *finality.*

***Try it*** in ***Chronic Catarrhal*** Diseases; spraying it on the diseased surfaces, with immediate addition of peroxide of hydrogen; wash off instantly the decomposed exudation, scabs and dead tissue with antiseptic solution (Thiersch's); and then see how the mucous membrane stripped open and clean, will absorb nutrition, vitality and health from intermediate applications of pure bovinine.

***Try it*** on the ***Diphtheritic Membrane*** itself, by the same process; so keeping the parts clean and unobstructed, washing away the poison, and meanwhile sustaining the strength independently of the impaired alimentary process and of exhaustive stimulants.

***Try it*** on ***anything,*** except plethora or unreduced inflammation; but first take time to regulate the secretions and functions.

***Try it*** on the ***patient*** tentatively at first, to see how much and how often, and in what medium, it will prove most acceptable—in water, milk, coffee, wine, grape, lemon or lime juice, broth, etc. A few cases may even have to begin by drops in crushed ice.

A New Hand-book of Hæmatherapy for 1898, epitomising the clinical experience of the previous three or four years, from the extensive reports of Hospital and private practice. To be obtained of

THE BOVININE COMPANY, 75 W. Houston Street, New York.

PURITY.

# PEACOCK'S BROMIDES

THE STANDARD SEDATIVE

INDICATED IN ALL FORMS OF CONGESTION.

**Absolutely uniform in purity and therapeutic power.**

DOSE—ONE TO TWO FLUID DRACHMS IN WATER, THREE TIMES PER DAY.

# CHIONIA

THE HEPATIC STIMULANT

INDICATED IN ALL **Diseases Caused by Hepatic Terper.**

**Under its use the liver and bowels gradually resume their normal functions.**

DOSE—ONE TO TWO FLUID DRACHMS, THREE TIMES A-DAY.

**PEACOCK CHEMICAL COMPANY, ST. LOUIS, MO.**

AND 36 BASINGHALL ST., LONDON ENGLAND.

STANDARD.

# FOR INDIGESTION,

MALNUTRITION, AND ALL WASTING DISEASES,

# TRY

THE DIGESTIVE SECERNENT,

# SENG

DOSE—One or more teaspoonfuls three times a day. For babies, ten to fifteen drops during each feeding. Sample to any **Physician** who will pay express charges.

**SULTAN DRUG CO., St. Louis and London.**

# SANMETTO FOR GENITO-URINARY DISEASES.

**A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.**

**A Vitalizing Tonic to the Reproductive System.**

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—
CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

---

# KANSAS CITY MEDICAL INDEX

HERMAN E. PEARSE, M. D.,

EDITOR AND PUBLISHER.

Entered at Kansas City Postoffice as Second Class Mail Matter.

VOL. XIX., NO. 4. APRIL, 1898. WHOLE NO. 220.


## ORIGINAL ARTICLES.

### Acute Appendicitis.*


BY C. B. HARDIN, M. D., KANSAS CITY, MO.


Affections of this little organ on the bridge which spans the distance between the large and small intestine, has made volumes of literature in medicine and in surgery; and today much obscurity exists as to the best way to deal with its diseased states. It is connected at its open extremity to the cæcal border, usually points upwards and inwards, terminating in a blind extremity from three to six inches long, composed of dense tissue, lined by mucous membrane and studded with numerous solitary glands, covered by peritoneum which sometimes forms for it a mesentery, and rests on a bed posteriorly of areolar tissue. Diseases of this organ (functionless so far as we know) partly belong as to treatment to the physician and partly to the surgeon. The affections to which we shall now specially confine our remarks are, simple inflammation, suppurative inflammation, and perforation of the appendix of the acute type. Fortunately the first variety is the most frequent and the least dangerous, that of simple inflammation, while the other two (varieties) may only represent secondary and tertiary forms of the first. This organ, like all structures with mucous lining, is subject to catarrhal inflammation, which may originate from any of the series of causes producing this condition, in other similar tissues, and when thus affected, just as amenable to treatment as similar conditions in other like tissues of the body. If ordinary nasal catarrh (acute coryza) gets well, by judicious handling before œzna supervenes, equally sure does non-traumatic inflammation of the appendix do so as well. I am one who believes that most cases of this class get well, with *simple* treatment, and that it represents a large share of appendiceal troubles. This class of non-traumatic simple inflammatory states of the appendix, is the territory which belongs to the physician. The moment the transition is made from this state into one of pus formation, territorial

* Read before the Kansas City Academy of Medicine.

government has changed from physician to surgeon; let the foreign body or micro organism be what it may which initiates the change. That is to say, such a patient should, if not operated upon, be under the directing care of the surgeon. The location of an organ has much to do as to the triviality or seriousness of its diseased states. For instance, the presence of tubercular bacilli on the integumentary surface, producing lupus, is of trivial moment compared to their presence in lung tissue. The appendix is surrounded by brush piles ready for ignition by the bacillary torch at any moment, and the dangers here of unrelieved microbic action are too well understood, to require attention. To arrive at a symptomology of practical definiteness, as to *when* pus is present and when ulceration begins, and *from* what cause, is the thing to determine. At this point the general practitioner must not relinquish his just claim on appendicitis, and thus be driven from the field, even though the surgeon boldly and defiantly, yet mistakenly, claims it essentially and universally a surgical affection.

I think the above is somewhat the tendency of the present age.

Constantly claiming a thing wins its ownership quite often, whether right or wrong. Surgical claims in this disease have been ceaselessly widening in America since 1867 when Willard Parker first operated for suppurative appendicitis. This is partly justifiable, but the great merit lying within the circle of judicious surgical interference, *of itself*, tends to embolden the surgeon and cause him to go beyond proper limits and his rightful precincts. I will say, however, if this be not reasonably definable, and that if the physician be not reasonably sure of the simple form of inflammation, then the safe thing to do is to invoke surgical aid *or at least* surgical consultation. The diagnosis of the stages of appendicular inflammations therefore, *practically* defines the course to be pursued, and I think has not been given sufficient attention. I don't believe that it is so easy of diagnosis, and that any ordinary practitioner of medicine or of surgery can simply, on entering the room, determine the trouble and its stage of action, as claimed by a gentleman of this city. It is time that we should stop calling every little pain at McBurney's point appendicitis, and advise the knife, operate, and feign great difficulty in breaking up adhesions (purely mental), mutilate the organ intra-abdominally, (out of sight) string the removed organ in alcohol, pocket several hundred dollars, turn and say to friends that you have just operated in time to save life, and this had been the hundredth operation without a death in the last twelve months. Of course death should *not* be expected to occur in the absence of a septic state, or in the absence of all signs and symptoms demanding judicious surgery. Now I hope I shall not be considered personal, for these remarks are directed to no particular individual, only to a class; but when a man has no mortality following his operations for appendicitis, and has much to do, it is a justifiable inference that his diagnosis is at fault, and that notwithstanding he has met with no mortality, he has probably taken many dollars to which he has no claim. To listen to the recital of the work of some, averaging several per week, a stranger would think that humanity in the last few years had been visited by a universal plague, whose chief characteristic was its epidemic nature, taking hold of whole families and communities in its deathly grasp, and that the only remedy advised, is to take away the offending organ at once, is queer. Yes, to this class I would suggest haste, else many of them will get well before preliminaries can be made for operation. I think this is apprehended and feared by some. This condition used to be the case in ovarian diseases, and so much of attention was paid to the unfortunates who happened to be afflicted with ovarian presence, and so much talk of operations for their impending danger,

that many women considered it a personal visitation of Divine wrath to have been born a woman, and wanted to be transformed at once into the opposite sex. These are crazes and forms of insanity, tinctured oftimes with a high grade of selfishness, which have to be endured even in this age. I know of no one who practices this, but we all realize that it *is* a pest and species of imposition on the profession, as well as the laity, with which the world has been periodically afflicted for some time, and from which no civilized community, is *entirely* exempt. Of course statistics grown on this kind of soil, are very unreliable, and their wide range of application, and the low mortality recorded, invite surgeons of little experience to undertake operations of this kind. I take it as previously stated, that it is seldom the operation that should prove fatal, but rather the condition for which the operation is intended to relieve. So I doubt whether, after all, it is altogether complimentary to have no mortality attend appendiceal operations: And if such persons so claiming are not careful, their intention of conveying the idea of superiority of skill, will be deflected from its course by popular judgment, and hence bring discredit upon the operator as well as the operation itself.

I have before stated that simple appendicitis where may be expected even a circumscribed plastic peritonitis, including also the condition conveyed by Binnie and others, of appendicular colic or catarrhal condition of the organ in the large majority of cases, requires no surgical procedure in the acute attack. Still every case should be watched with an eagerness scarcely comparable in any other affection. We must remember that the appendix has no fixed position, and this variableness of position is increased after inflammation in its structure or region has taken place. It is sometimes straight, again tortuous or twisted; still again almost bent at a right angle upon itself, which affects its circulation as well as its glandular and mucous secretion. A catarrhal state of its mucous membrane often starts from the cæcum and by continuity of structure produces like changes in the mucosa of the appendix; in this condition we find a swollen state of the mucous membrane, diminished calibre of the lumen of the appendix, increased glandular and mucous secretion, finally a congested state of the entire organ, and if unrelieved, necrotic changes in the involved tissues, thus giving the bacillus coli communis and other forms of bacteria a suitable soil for action. So many of these cases, stand in the light of preventive rather than curative treatment, and I think our efforts should be directed in the future more particularly in this direction, than heretofore.

I would in the majority of these cases not advise surgical interference for several reasons, and hence, would generally suggest the expectant plan, that is, the medicinal course. First, we know Nature has a remarkable tendency to restore injury wherever inflicted, which of course is largely dependent upon vital resistance of the subject. If the case presents with the well known symptoms of acute appendicitis, and the cause produce congestion or catarrhal inflammation from the presence of say, a fæcal concretion, the judicious giving of laxatives with external applications, rest, and restricted diet, all tend to stimulate appendicular peristalsis, and thus extrude the offending body, and relieve your patient. Here, allow me to advise, as has so often been done, against the administration of opiates to too great an extent for reasons obvious to all. After removal of intestinal contents by laxatives, and sometimes better by large medicated enemas, the judicious administration of anodynes conserves Nature's forces by assisting the inflammatory process if continued to assume the plastic type. Second, I would not, except in rare cases, advise operating, because to differentiate between appendicitis at this stage, and other affections of that region is quite dif-

ficult, such as acute indigestion, renal or biliary troubles or if a female subject, to tubal disease. Exceptions might be made, however, where the symptoms are extremely urgent. The subject assumes a very different aspect where we are called to a case accompanied by all the signs of acute inflammation plus those of the presence of pus in the organ itself, ulceration thereof, or we can define a tumor, which latter condition, if due to pus formation, of appendiceal origin, would indicate a previous rupture of the appendix. It is a rule in good surgery, not always of universal application, however, to liberate pus wherever and whenever found. Nature suggests strongly in this direction in many suppurative appendiceal cases, by her tendency to wall off pus formation making them practically extra peritoneal, and if not liberated by art, forms a false channel into an adjoining cavity, as bladder, bowel or pleura, or plunge the absess contents into the general peritoneal cavity, contaminated as they are, by noxious bacteria, and their products. This latter condition, together with a gradual leakage from the lumen of the appendix, into the abdominal cavity, constitute the great danger, of the future of the patient, entertained by the thoughtful surgeon. In the anticipation of this, where existing conditions, may or may not tend in this direction, invites the most discriminating judgment, of the surgeon, scarcely equalled in any other region of surgical diagnosis. Even after the formation of large abscesses around the appendix have occurred, we could burden your patience with statistical cures, *without* the intervention of the surgical art. On the other hand, many cases of reported death have occurred, when unrelieved without previous signs of even an abscess, but only a slow leakage of pus had occurred into the general peritoneal cavity. If the surgeon could be assured that suppurative appendicitis, would *always* be attended by the plastic form of peritonitis, and would not yield at any point, to pressure from within, thereby excluding the general peritoneal cavity from invasion, extreme and immediate action of surgical interference could, in *most* cases be cancelled; but as our present knowledge affords us no definite data, to accurately determine, how thick may be the abscess wall, how virulent its contents, in what direction is its weakest point, and whether the local condition has rendered the appendix gangrenous, and many other undeterminable states, the surgeon *must* rely largely on skill, tact, and judgment, to conduct his efforts. Even though there is a mere leakage into the forbidden precincts of the abdominal cavity, if prolonged, or the pus be laden with noxious bacteria, *however small* the quantity, in this condition the peritoneum itself appeals to the surgeon for help, through the phenomena of inflammation. Nature has this way of manifesting noxious invasion, and asking for help In view of many dying without operation, and others getting well under apparently similar circumstances with an operation, and vice versa, warrants me, I think, in concluding, that the only time when surgical interference, can claim to save life *certainly*, is to cure the patient, *after* invasion of the general cavity by infective material, whether from a leakage simply, or a spontaneous bursting of the peri-appendicular abscess. In the above statement the remote causes of death, where neglect and postponement are indulged in, are not spoken of, as rupture into pleural sac. bladder, etc., with their consequences. Operations then for acute appendicitis, naturally divide themselves into two classes, justifiable I think, if properly understood. First, the early operation which includes primary acute attacks, with unusually intense symptoms, which refuse to be relieved by active medicinal measures within a short time, and where the symptoms are also unusually persistent. I think where this fact is arrived at, that operation is advisable, when environments permit, even in the absence of pus

symptoms. In the second class or the late operation, in acute cases, are those where a tumor is definable of appendicular origin, provided the conditions are favorable, and in the judgment of the surgeon, there is danger of peritoneal invasion. In the second class would naturally be included those cases where already the abscess contents have escaped, or are escaping, into the abdominal cavity. It will be seen clearly from the foregoing, that there may be instances, where the wise surgeon would forego operation in both classes of subjects; these exceptions must ever be left to his judgment. You will perceive that I have refrained from dealing with long and dry statistics, and I can assure you that the above utterances are my own, no one being responsible for the many errors doubtless contained in this short paper. My claims in brief are these: First, that statistics prove a large per cent of primary acute appendicitis cases are of the simple inflammatory variety, that this is the most common form, that most cases get well under medicinal treatment when seen early, and that this territory, as a rule, belongs to the physician, or, as commonly termed, the general practitioner. Second, that the claim of the surgeon is too broad in the statement (as often made) that appendicitis is always a surgical affection. Third, when pus formation, either in or outside of the appendix, reveals itself, surgical aid and co-operation should be invited. Fourth, that differential diagnosis of the stages of the affection has not reached that point we would desire. Fifth, that the safety under antiseptic precautions of entering the abdominal cavity, tends to rashness and indiscriminate operating, which distorts statistics, and renders them unreliable. Sixth, and lastly, that the disease as to its treatment in the acute form is, if we are to rely upon the statistics of the world, medico-surgical and not surgico-medical. I say this because the trend of authority seems directed to the "*Internal Operation*" as the one of election: when possible.

Kansas City, Mo., Feb. 5, '98.

## Serum Diagnosis of Typhoid Fever.*

BY DR. I. J. WOLF, KANSAS CITY, MO.

The object of this paper is to call the attention of the Kansas City medical profession to a new method of diagnosing typhoid fever with the aid of the microscope. This method is generally known under the name of "Widal's" serum diagnosis and has already been in use for the past year in the laboratories of the Board of Health of the principal cities of this and the European countries. The importance of this subject and the fact that this test has been very little made use of here in Kansas City save by myself and Dr. Kruger for a few members of the profession, led me to respond willingly to the invitation of this society to present a paper on this subject.

That an improved method of diagnosis of typhoid fever is not unwelcome to the physician, is best recognized by those practitioners whose large practice brings them over and over again to the bed-side of a patient in whom the differential diagnosisof typhoid fever from other affectionsis, is for a time at least, difficult or impossible even to a skilled diagnostician.

I well remember that when I first came to this city, some nine years ago, typhoid fever was thought to be rather rare, and only since men like Dr. Van Eman and others began to make post-mortem examinations of cases, supposedly dead from other diseases, and the knowledge of the

* Read before the Kansas City Academy of Medicine.

frequent deviations of typhoid fever from the normal type, amounting sometimes to entire absence of nearly all symptoms of the disease, has become more prevalent, has the existence of typhoid fever found to be not so rare after all.

The time that I shall devote to this paper is too short to allow me to present all the scientific details of the test, or to go into a historical account of the same. Suffice it to say that, as every other discovery in bacteriology, so has this one not been the result of an accident, but the logical outcome of patient and persistent laboratory-work and investigations concerning the subject of immunity. These investigations culminated in the discovery first communicated to the medical world June 26, 1896, by Widal, that the bloodserum of patients, suffering from typhoid fever, had the power to agglutinate and immobilize the typhoid bacilli when mixed with a pure culture of them.

There are two methods of making the test, the macroscopic or slow one, and the microscopic or quick one. The former consists in adding to ten parts of a pure typhoid bacilli-boullion culture one part of typhoid fever bloodserum. After two or three hours the turbid boullion culture becomes clarified and a clumping sediment composed of agglutinated bacilli makes its appearance.

The microscopic test consists in mixing a drop of bloodserum with ten drops of the culture and then examining one drop of this mixture under the microscope by the hanging drop method (which I shall demonstrate shortly). The reaction in this last test is considered to be positive, if after from thirty minutes to one hour the bacilli lose their motility and conglomerate in lumps of various shapes and sizes.

This reaction is a specific one in as far as typhoid fever bloodserum has no such effect upon other than typhoid bacilli and typhoid bacilli are not so affected by other than typhoid fever bloodserum. This specificity enables us on the one hand to make in a given case a differential diagnosis of typhoid fever, and on the other hand to apply it for the identification of the typhoid bacilli in suspected waters, stools, etc., a task which has hitherto been found to be a very difficult one.

But this specificity of the reaction is a quantitative one rather than a qualitative one. For it has been found that this peculiar agglutinative power is inherent in mostly all bloodsera, to such a small degree, however, that it can be easily overcome and eliminated by diluting the serum with water in the proportion of $\frac{1}{10}$ to $\frac{1}{50}$ in which dilutions only the specific agglutinative power of the serum is conserved.

More than one year's experience with this test has demonstrated that in order to be accurate and relied upon, it is necessary to observe certain precautions. One of the main points to observe is the reaction of the boullion in which the bacilli with which the test is made are grown. W. H. Welsh, of Baltimore, in a lengthy and beautiful paper read on this subject before the forty-eighth annual meeting of the American Medical Association at Philadelphia, June 1 to 4, 1897, says in regard to this point: "The medium should be favorable to vigorous growth, and not too strongly alkaline." This, gentlemen, is entirely misleading, if not incorrect. For I had occasion to repeatedly observe that in an alkaline medium natural clumping of the bacilli, with or without the addition of bloodserum, was not infrequent and gave rise to so called doubtful reactions and difficulty in their interpretation.

Wyatt Johnson, of Montreal, has made a great many investigations and experiments in regard to this point and ascertained that an acidity of the medium of thirty-five to the phenolphthalein as indicator was the best reaction and furnished a culture in which spontaneous agglutination was never observed. The cultures themselves should be fresh eighteen to twenty-four hours boullion cultures, made from stockcultures on

agar-agar and grown in the incubator at about 100° F. Such a culture is free from sediment and presents only a turbid appearance.

Of not much less importance is the question of diluting the serum, in order to eliminate the natural agglutinative power inherent in all sera. If you consider the fact that typhoid fever blood serum often shows an agglutinative power of 1/1000 and even more and very rarely one less than 1/10, whereas the normal agglutinative power of the non-typhoid blood serum is much less than that and in only rare instances is as high as 1/1, it follows that Widal's first recommendation to dilute the serum 1/10 may safely be adopted for all practical purposes. It is well, however, to add that for such a dilution, a thirty to sixty minutes time limit should be adopted; that is to say: the reaction, to leave no doubt, has to take place within thirty to sixty minutes.

This understood, the question yet to be considered, is: what constitutes a reaction? Is it, as Stern claims, the clumping, or, as Kuhnar suggests, the paralysis of motion, or as Welsh, Widal and others insist, both? At present, the opinion of most observers is that a typical reaction consists in both agglutination and loss of motion of the bacilli. In some cases the one phenomenon, in others the other is more prominent and first in appearing, but in most cases both phenomena make their appearance in due time.

These, gentlemen, are the principal points to be observed in making the test, both for practical and scientific purposes.

The question has been raised whether this reaction was one of infection or immunization? For various reasons, which I will not now mention, most observers regard the reaction as one of infection. And yet, personally, I am strongly inclined to look upon it as one of immunity, inasmuch as the reaction in most cases can yet be gotten long after infection has ceased and the patient recovered from his attack.

Wherein the nature of this agglutinative and bacteriolytic power of the bloodserum consists has not yet been demonstrated. If they are substances of a definite chemical composition, they have not been isolated. Suffice it to mention that this agglutinative power survives desiccation of the blood for months and may persist for months in serum, even when this is seriously contaminated with microorganisms. It is annulled by heating for ten minutes at 75° to 80° C.

Besides in the serum it is present in all serous fluids, blisters, milk and other body fluids.

"Thus far," says Welsh, "we have no satisfactory explanation of the production of the phenomenon of agglutination by specific serum. The phenomenon occurs with non motile as well as with motile bacteria, with dead as well as with living germs. Typhoid bacilli killed by formalin or by heating for five minutes at 58 C., are as sensitive to the reaction as the living bacteria," a fact which only increases the mystery as to the nature of these agglutinating substances.

This much about the test itself. If we come to its practical applicability to the diagnosis of typhoid fever, the first question that arises is: "How early in the disease is this test available for diagnostic purposes and how long does it continue?" The general consensus of opinion among the different observers is, that the reaction can usually be expected to be present by the end of the first or beginning of the second week, although, according to Johnston, it may appear as early as the second day of the disease. It should not be forgotten, however, that the reaction is sometimes delayed until the end of the second or beginning of the third week, and in rare instances is missed altogether. We meet here with the same experience that we meet in sputum examinations for tubercle bacilli. A negative result of the test does not exclude the diagnosis of typhoid fever, while a positive one is positive evidence of the disease.

As to the percentage of failure to get the reaction in undoubtful cases

of typhoid fever, a few figures will convince you of its insignificance. Widal found it only once in one-hundred and sixty-three cases; of one-hundred and sixteen cases examined by Courmont, the reaction appeared in all, being delayed after the eighth day in only five. Of one-hundred and twenty-nine cases examined by Johnston, the reaction was missed in only one.

In this connection it is interesting to state that cases which present nearly a complete clinical picture of typhoid fever, but fail to give a positive test with typhoid bacillus, will give the reaction with the colon bacillus, thus suggesting the probability of the existence of a definite and distinct affection, the colon bacillus fever. Clinically, this fact, if confirmed by further observations, is of great interest and importance to the scientist as well as to the practitioner.

The importance of repeated examinations is illustrated by observations, in which the test was negative at the end of the second week and positive two days later (Sterm.)

The reaction usually disappears within two to six months after subsidence of the fever, but may on the one hand vanish as early as eight days thereafter, on the other hand persist indefinitely. This persistence of the specific reaction is of practical importance. Thus Courmont was able to determine by the serum diagnosis that a patient with multiple neuritis, supposed to follow an attack of dysentery, was in reality convalescent for one month and a half from typhoid fever (Welsh). The persistence of the reaction also emphasizes the importance of obtaining a careful history of the patient with regard to previous attacks of typhoid fever, before interpreting a positive reaction obtained with his serum.

Of no less practical importance is the question, in what percentage of cases of non-typhoid fever do we get a positive reaction with this test? As an answer to this question I will quote the words written to me by Dr. Johnston only a few weeks ago. "We have just examined two-hundred non-typhoidbloods with absolute negative results; no reaction and no pseudoreactions."

In arriving at such beautiful and accurate results, he lays more stress upon the reaction of the culture than upon the dilution of the serum, which for clinical purposes need not be exact. But the reaction of the boullion, he insists, must be of a certain degree of acidity and not, as Welsh says, "not too strongly alkaline." "We have," says Johnston in another letter addressed to me, "got here to the point where we can produce at will, most of the pseudoreactions, which worry other people, by simply changing the acidity to various degrees of alkalinity."

Considering then that a positive reaction takes place in more than ninety-nine per cent of all typhoidbloods, and that non-typhoidbloods will give neither reactions nor pseudoreactions in properly conducted tests, it seems to me that the conclusion is justified that we have in this test a very valuable addition to our means of diagnosing typhoid fever. And with this conclusion my own observations harmonize in almost every detail.

My experience with this test has, it is true, been thus far very limited.

At first I was greatly annoyed in my work by so-called pseudoreactions; so much so, that in my despair I wrote to a friend of mine in New York, complaining that I had more trouble with the test than the reports of other observers seemed to justify. His answer was very unsatisfactory, and not until I communicated with Dr. Johnston, did I find out the cause of, and remedy for these pseudoreactions. And I take pleasure in using this occasion to publicly thank Dr. Johnston for the readiness with which he volunteered advice and gave me the benefit of his vast experience and experimental work.

My method of applying the test is the so-called dry blood method, originated by Widal and introduced into clinical work and boards of health by Dr. Wyatt Johnston. It is a very

simple and convenient method, eminently suited for the use of the physician, and fairly accurate. The blood, to be examined, is gotten by pricking the finger tips or lobe of the ear, previously cleansed, with a sterilized needle and placing a drop or two upon a sterilized piece of paper, such as the druggist uses for putting up powders. After allowing the blood to dry, fold the paper and send it to the laboratory. There I place a large drop of sterilized water on top of the dry blood drop, let it stand for a few minutes, and then take off a loopful from the top, taking care not to stir the clot. Then I mix this loopful of the blood-solution with a drop of twenty-four hour typhoid-culture, and examine with a one-eighth objective by the hanging drop method, watching the specimen for about one hour. If no reaction has occured by that time, I set it aside to return to it again from time to time up to five or six hours. I regard the reaction as positive, if after a reasonable length of time, say one to two hours, decided clumping together with loss of motion of the greater number of the bacilli has taken place. To give you the results of my examinations up to date, I will briefly give a concise history of the following cases, kindly sent to me for examination by several of my colleagues:

First, case of Dr. Block's. Child, male, seven years old; cured of Pott's disease; presents an atypical case of typhoid; run of fever for five weeks; tympanites; vomiting; no diarrhœa; no spots; no pulmonary or tubercular trouble; test made on the tenth day of disease; positive reaction.

Second, case of Dr. Block's. Woman, twenty-two years old; duration of disease, twenty-one days; high run of fever; no diarrhœa; some tenderness in right iliac region; great nervousness; some delirium; recovery; test made on eighth day; positive reaction.

Third, case of Dr. Sloan's. Girl fifteen years old; a typical case; one month's fever reaching to 105½; spots appearing late; typical tongue; test made on seventh day; positive reaction.

There were two more cases in the same family, both of which were cases of typhoid fever, but no test was made in these two cases.

Fourth, case of Dr. Rosenwald's. Boy twelve years old; took sick with irrgeular chills; temperature irregular from 99 to 104; spleen slightly enlarged; diarrhœa; tongue moist; no spots, but hemorrhage. Test made eighth day; decided reaction.

Cases fifth, sixth and seventh, City Hospital cases; running more or less typical course of typhoid fever; test gives positive reaction in all three, although delayed in one of them.

Eighth, case of Dr. Block's. Gentleman seventy-five years old; no classical symptoms; irregular run of fever; great depression; severe cephalalgia; recovery after six weeks; test made on eighth day; positive reaction.

Ninth, case of Dr. Block's. Man sixty-two years old; said to have been ill when first seen, sixteen days; confined to bed three days; claimed to have had subnormal temperatures with slight rise in the evening; no diarrhœa; general melaise; had been heavily dosed with quinine; temperature 103½° F., P. 57 Serum diagnosis negative; twenty-four hours later again negative; plasmodium supposed to have been found; large doses of quinine useless; four days afterward serum diagnosis decidedly positive; spots appeared; sudamina; great prostration; epistaxis; hemorrhage from bowels one week thereafter with temperature nearly up to 104½; slow pulse; no delirium, but great nervousness and jactitation.

Tenth, case of Dr. Block's. Boy nine years old, nosebleed; sudamina: some diarrhœa; retrocolic abscess; operation ninth day; recovery; serum diagnosis negative.

Eleventh, case of Dr. Block's. Young medical student; sick sixteen days when test was made; reaction negative; had diarrhœa; irregular temperature. This is his fourth attack; treated once for typhoid in one

of the attacks; operation for appendicular abscess performed today.

Twelfth, young man, twenty-three years old; had for several weeks prior to becoming bedridden, pain in right iliac region, referred to appendix; irregular fever, (highest 101½), running up to 102½ to 105 immediately before operation for appendicitis, falling to normal on the day of and immediately after operation; from then on temperature gradually rose to 104°; slow pulse; atypical tongue; no spots; serum diagnosis five days after operation very positive; this case run afterwards a protracted course of typhoid fever with hemorrhages.

Thirteenth, Arthur Calloway, City Hospital, twenty-eight years old, sick about five or six weeks; diarrhœa; rose colored spots; iliac tenderness; hemorrhages; delirium; temperature 102 to 104; pulse 96 to 110; tongue typical; typical reaction. This patient died afterwards from typhoid-pneumonia.

Fourteenth, John Basey, City Hospital, twenty-four years old; sick one month; diarrhœa; tenderness; cough; dry pleurisy; delirium; no spots; moist tongue: temperature 102 to 104½; pulse 100 to 116. Reaction typical.

Fifteenth, Grace Adair, twenty years old, convalescing ten days; had diarrhœa; iliac tenderness; temperature 100 to 102; pulse 96 to 108; no delirium; no spots; no typical tongue; no hemorrhage. Clinical diagnosis; light attack of typhoid fever; test gives negative reaction.

Sixteenth, E. Ryan, City Hospital, thirty years old; convalescing one week from typhoid fever; typical; complicated with pneumonia; no hemorrhage; temperature 103 to 106; pulse 80; typical reaction.

Seventeenth, case of Dr. Sloan's. Woman, forty-five years old, who had an attack of typhoid fever thirty years ago; temperature 104 to 101½; pulse 120 to 106; no spots; but petechiæ over abdomen and back; sensorium dull; spleen not enlarged; no epistaxis; epigastric tenderness and vomiting; tongue heavily furred, red on edges; no diarrhœa; test made on seventh day; reaction negative; test repeated on tenth day; reaction again negative. The fever in this case subsided rapidly; clinical diagnosis; cryptogenic septic fever or remittent fever.

Eighteenth, case number nine, (old man sixty-two years old) was re-examined during beginning convalescence; reaction very decidedly positive.

Nineteenth, man twenty-eight years old; City Hospital case; sick for six weeks with typical case of typhoid fever; convalescing; serum reaction positive.

There are a few more cases in which I applied the test, in all I have made about twenty-five examinations; in no case did I get a positive reaction that proved afterwards to be something else but typhoid fever. Your especial attention I would call to the two cases of typhoid in old men, one sixty-two, the other seventy, in both of which did the serum test confirm the clinical diagnosis. It is my belief that this test will prove many a fever in old or young to be typhoid, though the latter is thought to be rare at extreme ages.

I also call your attention to the three cases of appendicitis, two of which gave a negative reaction, one however, a positive one, and this latter proved afterwards to run a typical typhoid fever course. Whether the appendicitis in this case was caused by the same typhoid poison, *i. e.* germ, or was an independent disease, is an interesting question.

The conclusion reached by me, even after so limited experience, is that this test is a valuable aid in the diagnosis of doubtful cases of typhoid fever and is another instance of the increased accuracy in diagnosis obtained by exact scientific methods. The test is in this respect to be placed alongside in importance to the staining of the tuberclebacillus for the diagnosis of consumption. And I would suggest that our city Board of Health follow the example of like institutions in the cities of New York,

Boston, Montreal, etc., and place the facilities of having this test made by its bacteriological department at the disposal of the local profession. If properly made, the test will clear up many a doubtful diagnosis, and I am sure its value will only be denied by those who deny the relation of bacteria to disease at all.

210-211 Rialto Building.

---

## The History and Diagnosis of a Case of Progressive Pernicious Anæmia, Complicated by Pyæmia.*

BY C. W. DULIN, M. D., KANSAS CITY, MO.

A case of anæmia is of little interest. But progressive pernicious anæmia is not of frequent occurrence and complications thereof are extremely rare.

The patient was a male, twenty-three years old; a native of Sweden; single, and had been an engineer. Family history negative. Has always had good health except an attack of scarletina when very young. Has never had a venereal disease and has always lived under comfortable circumstances.

While enroute to the United States from Sweden six months ago, became seasick on Atlantic. Has had poor health since, growing gradually weaker. Two weeks ago, was told by his physician that he had "Not enough blood." Two days later throat became sore, and it has become more and more annoying until this time, when he becomes my patient.

Is rational, poorly nourished, appetite poor, tires after little exertion. Pupils enlarged, equal and reaction normal. Retinæ normal. Scleræ pearly white. Conjunctivæ and other visible mucous membranes and skin extremely pale. Acute glossitis fetor ex ore, soft palate and pharyngeal vault hyperæmic. Right tonsil totally destroyed by suppurantion.

Chest normal. Heart negative on percussion, but a faint systolic pulmonary murmur and hum over veins of right side of neck are heard. Lungs negative. Abdomen scaphoid, spleen not palpable. Limbs and genitalia negative. No adenopathy.

Cultures from tonsil show streptococci.

Cultures from blood show nothing.

Number of red corpuscles ad c. mm. 900,000.

Number of white corpuscles ad c. mm. 16,000.

Hæmoglobin 25 per cent.

Average temperature at 4 P. M. for six days 99° F.

Average pulse at 4 P. M. for six days 96. Easily compressed.

TREATMENT.—Iron manganese. Kalium iodide, bichloride of mercury and mercurial inunctions, local treatment of throat with pyrozone and salicylic acid.

Large amount of gangrenous tissue removed from soft palate on various occasions. Severe hemorrhage from pharyngeal vault on sixth day. Could be controlled only by compresses. Compress removed on seventh day, when following signs and symptoms were noted:

Chill followed by temperature of 103° F.

Urine pale. S. G. 1.016. Considerable albumin, and few granular casts. No pus or blood.

Intellect not impaired, retinæ normal, increased pallor of skin and mucous membranes. Complains of vertigo except when on back with head low. Both tonsils uvula and mucous membrane of pharyngeal walls and vault, completely destroyed by suppuration. Ulcer has hyperæmic base. Margin is ragged and covered with dark gangrenous shreds of foul odor.

---

* Read before the Kansas City Academy of Medicine.

A loud continuous hum is heard over both sides of neck and systolic murmur all over precordia. Complains of paroxysmal pains in extremities, which is aggravated by pressure or motion.

Number of red corpuscles ad c. mm. 570,000.

Number of white corpuscles ad c. mm. 20,100.

Hæmoglobin 20 per cent.

The majority of discoid corpuscles were of normal size and outline, but a few microcytes and an occasional poikil ocyte were to be seen. No macrocytes or myelo cytes present.

The increase in white corpuscles 1:248, was of polynuclear neutrophile type alone.

Temperature after seventh and till tenth day, at which time death occurred, was high and irregular. Had during the seventy-eight hours four chills.

POST MORTEM EXAMINATION.—Body only fairly well nourished. Rigor mortis almost absent. Suppurative process in throat destroyed all tissues down to palatal and pharyngeal muscles.

Heart weighs 300 gms. Pale and soft. Microscope shows granular myocarditis. Endocardium normal. Pulmonary valves competent to water test.

Mucous membrane of trachea and larynx shows acute exudative inflammation.

Lungs normal except recent embolic infarct in right apex as large as pecan.

Spleen, soft and pale. Weight 240 gms. Microscope shows acute diffuse splenitis, with numerous minute abscesses.

Liver weighs 1,600 gms. Microscopically I find acute hepetitis with multiple abscesses.

Kidneys pale. Weigh 320 gms. Acute diffuse nephritis with formation of multiple abscesses. Slight evidence is seen of a beginning chronic interstitial nephritis.

Gastro intestinal tract normal except extreme pallor of mucous membrane.

Bone marrow shows no change.

Skeletal muscles pale and soft. Microscope shows acute granular myositis.

The following conditions are etiological factors in fatal anæmias.

Hemorrhage, micro organisms in blood, ex. "Cercomonas globulus" and "cercomonas navicula." (Frankenhauser).

Chronic atrophy of stomach, exhausting diarrhoeas, chlorosis and purpura, renal, splenic, miasmatic, glandular strumous and malignant diseases.

None of these can be considered as an etiological factor in this case.

Essential anæmia is by some, regarded as a condition resulting from pathogenic bacteria affecting the blood itself, or the hæmatopoietic system.

That the anæmia was not a condition dependent upon vascular infection, is evident.

First. Because the anæmia was present long before development of tonsillitis and no signs of pyæmia were present until third week of tonsillitis.

Second. Bacteriological examination of blood prior to time of hemorrhage gave no results.

That immediate cause of death was pyæmia is shown clearly by post mortem findings.

That he had pernicious anæmia from following facts:

1. A continuous decrease in red corpuscles, with a plus percentage of hæmoglobin and presence of micro-and poikilocytes.

2. No leucocytosis, except of polynuclear neutrophile type, which occurs in all febrile diseases and during period of intestinal digestion.

The skeletal muscles in progressive anæmia are of dark red color. These were pale because of granular degeneration caused by pyæmic infection

Changes in bone marrow occur in all profound anæmias and not alone in pernicious anæmia. But it always takes place late in disease. Because this bone marrow was normal, is no argument against pernicious anæmia, because it is reasonable to presume that had he lived longer such changes would have taken place. Likewise fatty degeneration of liver and heart.

501 Rialto Building.

## House Disinfection.*

BY E. VON QUAST, M. D., KANSAS CITY, MO.

The enormous achievements in bacteriological science have caused very thorough investigations as to the best methods of disinfection for contagious and infectious diseases.

The demand was to find an agent which would thoroughly sterilize disinfected hospitals, schools, private houses, cars, (especially sleeping cars), ships, vehicles, etc., without destroying contents.

Sulphur fumigation was shown to be not only destructive to valuable material but also inefficient, especially in fumigating for pathologic germs; the disease, for which fumigation had been employed, often reappearing in members of family who had been absent during prevalence of the disease, or in subsequent tenants of the same house (more especially is this noticeable in typhoid fever and tuberculosis).

The clamor for better, more effective disinfection suggested washing and cleansing walls and woodwork and entire repapering and painting—this cleanliness so near to Godliness was probably more effectual than the sulphur gas itself.

To disinfect thoroughly means to destroy germs and spores which are in the dust or adhere to the walls, crevices, apparel, draperies, which sulphurous gas has never successfully accomplished. The same criticism may be passed upon the steam sterilizing process which is even more destructive to material than sulphur, besides the steam method requires an expensive plant.

The most valuable method at the present day, which has been fully investigated in eastern cities and laboratories is, formaldehyde gas. One quality which strongly recommends th is isits non-destructiveness of material, in addition to which it *completely* destroys all micro-organism and their food; the truth of this has been proven by trial and experiment by expert health officers and chemists of established repute in laboratory work.

For the purpose of generating formaldehyde gas a number of lamps and generators were invented and placed upon the market; in the lamp, methyl alcohol (wood alcohol) is used to generate gas by oxidation. The principal objection to the lamp is the slow process and insufficient production of gas, besides being uncertain in action.

Another successful method of using formaldelyde gas is by generating it from the forty per cent aqueous solution. An apparatus of considerable value has been invented by the Sanitary Construction Company, it was thoroughly tested by Doty of New York. It has been shown that formaldehyde solutions sold as 40% solutions frequently run as low as twenty-three per cent and that they are full of methyl alcohol which combines with an equal part of formaldehyde forming methyl oil which contains no disinfecting properties, therefore could not be compared with a reliable pure article. The most valuable apparatus for thorough disinfection is the Trillautoclave. I have had it on trial in the city work for investigation of its efficiency. We use in it a formo chloral which combines chloride of calcium with formaldehyde solution. The gas is generated under pressure which is rapidly released through a small tube from outside into the room or house to be disinfected. One quart of the liquid will disinfect a space of five-thousand cubic feet. All material should be exposed for not less than three hours, the fumigation should last from one to two hours, according to size of room; after withdrawing tube from key hole it should be filled tight with cotton and the room closed air tight from three to twelve hours. After opening the windows, ammonia

* Read before Kansas City District Medical Society.

placed in shallow vessels will cause the rapid disappearance of the gas.

In the light of recent events we all realize the urgent necessity for thoroughness in this work. Where human life and health is at stake, we should seek for and accept only the most perfect methods.

### Abnormal Situation of the Anus.*

BY D. W. BASHAM M. D., NEAL, KANSAS.

A young woman, married, and the mother of two healthy children, came to consult me in regard to endometritis consequent upon an abortion. In the course of a digital exploration of the vagina the index finger encountered an aperture in the recto-vaginal septum. The opening was believed to be a recto-vaginal fistula, and in order to place the diagnosis beyond controversy an effort was made to introduce the index finger of the free hand into the rectum, and thus communicate with the finger resting in the supposed recto-vaginal fistula. The anus not being found by the finger, ocular inspection demonstrated its absence. The length of the perineum, extending from the posterior commissure of the vagina to the tip of the coccyx, presented a very remarkable appearance.

The patient gave a history of some times passing of fiatus per vaginum, but she seemed oblivious to the fact that feces were habitually being discharged by the same route.

Having established the fact that the anus communicatad with the vagina instead of the external world, its form and situation were more carefully noted. The form was that of a buttonhole-slit with the long axis placed transversely to that of the vagina, and being possessed of sphincteric properties. The situation was about an inch within the vagina from the vulvar outlet.

While I deemed it feasible to split the perineum, dissect up the malplaced anus and liberate the rectum sufficiently to allow the anus to be brought down, and united to the skin, and to close the vaginal wall in front of the rectum, and perhaps establish something like a perineum I did not advise the operation, because the woman's health was in no way disturbed by the condition.

## COMMUNICATIONS.

### Appendicitis with Perforation Under Twenty-four Hours.

Patient, Ed. C.; age twenty years; tall, slender; family history good; was brought to my office February 1st, 1898, at 9 p. m.; said to be suffering from colic; severe pain in right hypo-region; temperature 103; pulse 125; respuctive 28 labored. At 11 p. m. a very severe chill and rigor set in lasting one hour; diagnosed appendicitis; called in Dr. Pickens, his family physician, who agreed on the diagnosis, and we at once advised a laparotomy which was done at 4 p. m. the following day. Found perforation of the appendix; severe peritonitis; enteritis; quite tympanitic; found contents of bowel in abdominal cavity; also a large amount of exudate. Appendix adhered to abdominal wall; removed appendix; assisted by Drs. Perkins and Dittebrandt; flushed out the abdominal cavity with sterilized water.

Result; temperature and pulse fell

* Written for the MEDICAL INDEX.

to normal inside of ten hours, and patient out on the street in seven days. The notable points in this case are: Perforation of appendix inside of twenty-four hours from beginning attack, and notwithstanding the intense inflammatory conditions, the return of temperature to normal, inside of two hours from time of operation. It never was above normal afterward. Drs. Pickens and Dittebrandt were the consulting physicians and assistants.

Respectfully, E. B. EMORY, M. D.

Winfield, Kansas.

# SELECTIONS.

## Something Right About Catgut.*

BY ROBERT T. MORRIS, M. D., NEW YORK CITY.

Several major points and several minor points about catgut will be remembered more easily if we group them separately.

*Major Point No. 1.* When buying catgut order the sizes by American standard wire gauge. Different dealers have an arbitrary numbering of sizes and that causes a great deal of confusion. An American standard wire gauge can be found in the hardware shops and in mechanic's workrooms—and if you order sizes by that definite measurement, the dealer who receives the order can step around the corner and invest half a dollar in a proper little wire gauge which tells him how to number catgut accurately.

*Major Point No. 2.* The form of catgut is important because of the ease or difficulty in handling it.

I prefer the sort sold by dealers in watch makers' supplies. It is used for their bow drills, and goes by the name of "bow lines." Each bow line is one metre in length. As many strands as we choose can be removed from the bottle at the time of an operation, without contaminating the remainder.

*Major Point No. 3.* Catgut is satisfactorily prepared by the formal process. The word "formal" is the proper contraction for the word "formalin." The word "formalin" is the trade term for a commercial preparation of a forty per cent solution of formaldehyde gas in water. A two per cent solution of this commercial formalin is what we mean when speaking of a two per cent solution of formal.

*Major Point No. 4.* Catgut raw, oily and dirty is placed in a jar of water containing two per cent of formal. The bulk of the water should be three or four times the bulk of the catgut. The catgut remains in this solution for forty-eight hours, and by the end of that time it has become hardened and sterile. It can then be boiled in water without suffering damage if the formal is removed.

*Major Point No. 5.* Formal is irritating to the tissues and it destroys catgut unless it is removed. Wash out the formal by putting the catgut in a bowl and letting water from the faucet run through it for twelve hours. Better attach a rubber tube to the faucet and drop one end of the tube in the bottom of the bowl of catgut so that water escapes upward through the mass of catgut—carrying formal with the overflowing current. The catgut which was hardened and sterilized is now contaminated by the tap water and it needs to be boiled in water for final sterilization.

*Major Point No. 6.* Boil the catgut in water for fifteen minutes.

*Major Point No. 7.* Put the boiled catgut in absolute alcohol and use it directly from the alcohol at time of operation.

* A Lecture at the N. Y. Post Graduate Medical School, Oct. 21, 1897. From the *New England Medical Monthly.*

*Minor Point A.* Catgut prepared by the formal process resists absorption in the tissues in proportion to diameter. We may expect that No. 16 American standard wire gauge will resist complete absorption for three weeks, while No. 26 will be absorbed in about a week.

*Minor Point B.* If you wish to prepare a lot of catgut with greater resistance to absorption, add one-fourth of one per cent of bichromate of potassium to the formal solution.

*Minor Point C.* Catgut does not dry so quickly on removal from the alcohol if five per cent of glycerine is added to the alcohol.

*Minor Point D.* Catgut placed in alcohol immediately after being boiled carries a good deal of water in its tissue, consequently it is better to abstract the water by placing the catgut in one jar of alcohol for a day and then transferring the catgut to another lot of alcohol for permanent storage.

*Minor Point E.* Catgut twists into knots when it is being boiled in water. To prevent this, bunches about the size of hen's eggs are firmly rolled in a gauze bandage and the bandage is tightly pinned before the lot is thrown into boiling water.

*Minor Point F.* Boiled formal catgut shrinks to about two-thirds of its former length, and is too elastic to be used with comfort. To obviate this a strand before being used is pulled out to its original length with the hands, when it suddenly loses its elasticity and remains at its original length.

*Minor Point G.* If catgut has been taken out of the alcohol bottle and not used at an operation, boil it again before replacing it in the bottle.

For fourteen years I have depended upon catgut for use in all of my work excepting in certain bone surgery which required the employment of silver wire.

During these fourteen years I have occasionally taken up other materials for sutures and ligatures, but have quickly discarded such materials for catgut again. *Kangaroo tendon* seems to be as good as the best catgut but it is more expensive and the sources of supply cannot be depended upon. I used up a lot kindly given me by Dr. Marcy, and found it excellent, but no better than my own good catgut.

*Silk* often works out of a wound or scar slowly and causes troublesome sinuses. I have at present in the hospital a patient whose buried silk sutures have been gradually coming out of an abdominal scar for several years. The excursions of silk sutures are well known. The idea that silk knots hold better than catgut knots is advocated principally by men who tie granny knots. The first thing that a surgeon should learn is the tying of a square knot—but I have seen granny knots tied by at least one distinguished surgeon.

*Horse hair, linen, Chinese grass* and various other suture materials are advocated from time to time by men who do not prepare catgut well.

*Silkworm gut* is an instrument of the devil when used for buried permanent sutures. About three years ago I read an article on the use of silk-worm gut by a surgeon whom I knew to be a careful observer, and I was tempted to give up my good-enough catgut for something better. In the course of six weeks I employed buried silkworm gut sutures in some twenty abdominal operations for patients who had put confidence in me and had entrusted their lives to my care. At the end of the six weeks I found that some of these buried silk knots were coming out in strange places and some of them are coming out yet—three years elapsed. One patient died as the result of the burrowing of a silkworm gut knot in the pelvis several months after operation. Nearly all of the patients suffered in one way or another. The surgeon who wrote the paper advocating the use of the buried silkworm gut knot, has written another paper saying that he is sorry. Meanwhile, other surgeons are bringing discredit upon surgery by taking up this innocent looking suture material which

is so smooth and nice but which refuses to become encapsulated in the tissues, and which comes out of the bladder or iliac vein just after the surgeon has written his paper. A recent advocate of the buried silkworm gut suture intimates that some of us did not use aseptic precaution, and that we did not choose the right sort of silkworm gut. To this I will reply that most of my wounds healed completely by primary union and the knots came out months or years afterward. Further, as a fisherman I am fully conversant with the subject of silkworm gut and have not been deceived in the quality of the material used. To those who say they have had no trouble with the buried silkworm gut knots I wish to say that they have not taken the trouble to find out. The trouble is all on the part of the patients. The patient goes to one surgeon for operation, and to another one to complain. So it requires two surgeons to write the history of buried silkworm gut.

## The Treatment of Hemorrhoids by Ligature, by Injection, and by the Clamp and Cautery.*

BY HERMAN E. PEARSE, M. D.,

Professor of Anatomy, Kansas City Medical College: Consultant to the Kansas City, Fort Scott & Memphis R. R. Hospital, Editor "The Kansas City MEDICAL INDEX" Etc.

The victim of hemorrhoids sooner or later comes for relief to his doctor. He will ask first a prescription; that failing a treatment of some kind; last of all an operation under chloroform.

The anatomy of the parts explains well the classification of external and internal hemorrhoids. The former are derived from the inferior and middle hemorrhoidal veins, and the latter from the superior hemorrhoidal. The superior hemorrhoidal veins supply the rectum above the sphincters—have no valves, and empty into the mesenteric vessels and thence into the portal circulation. These form the internal pile, (where it is a venous tumor, as it generally is in the beginning,) and is caused by any obstruction to the circulation through, or disease of, the visceral venous system, as in liver diseases, retroversion of the uterus, stricture, etc. The middle and inferior hemorrhoidal plexuses supply the anus and contiguous structures, and empty into the iliac veins and thus into the right heart via the vena cava. Their dilatation becomes a fact when disease of the general venous system is at fault; as in protracted alcoholism, hard coughing, lifting, etc.

The two anastamose, thus forming one of the means of collateral circulation when cirrhosis or other obstructive disease cuts off the portal circulation by pressure.

Clinically, however, we speak of external and internal piles according as they are above or below the grip of the sphincter, and we call them capillary, arterial or venous as they show a preponderance of these blood vessels.

As to treatment (the subject of this paper), we have three principal lines for attack, the injection of caustic and astringent substances, the ligature and excision, and the clamp and cautery. The injection method can be used on all kinds of cases—external, capillary, venous, strangulated and ulcerated, yet it is not desirable so to use it; in fact, the real usefulness of the method rests in the treatment of internal hemorrhoids of limited number and small size, that have not much ulceration; yet, I repeat, that with a good fluid and due care in its use it is possible to cure almost any case of hemorrhoids by injection, if the patient will spend time enough for

* Read before the Central District Medical Society, at Sedalia, Mo., November 4, 1897. From *Kansas Medical Journal*, November 20, 1897.

the treatment to be completed. When inflamed and engorged, it is better if the parts be relieved by a few days of preparatory treatment, which should consist of hot douches, rest, and cathartic doses of sulphur and cream of tartar to unload the portal circulation. When ready for treatment the patient is placed on his side, with limbs drawn up and the tumors brought into view. A five-percent solution of cocaine applied to the parts, relieves the pain, and a little straining will cause the pile tumors to protrude.

The tumor selected is then punctured with a fine hypodermic needle, attached to an ordinary hypodermic syringe, and a few drops of the fluid deposited into its tissue. In pendant tumors get into the center. In sessile tumors inject into their bases. Be careful not to inject the fluid into the muscular tissue of the bowel, as it will cause sloughing of tissue and much prolonged suffering. The portion of the tumor that has been sufficiently injected will turn a dull grayish color, showing the death of the tissue. Where in doubt as to the amount to inject, use two or three drops, and hold the needle in situ while awaiting its action. A few more may be required. I have used the following fluid with success, the formula for which I have taken from Dr. Agnew, of San Francisco, who published it in his book on this treatment:

SOLUTION 1.

℞ Plumbi acetatis.
Sodii biboratis, aa, ʒ ij.
Price's glycerine, ʒ i.

Mix in a graduate and let stand in a warm water bath for twenty-four hours.

SOLUTION 2.

℞ Calvert's No. 1 carbolic acid, cryst., ʒ j.
Aqua destil, ʒ ij.

When well dissolved, add six drams of No. 1 to ten drams of No. 2.

This makes a solution that turns pink on standing, and, unless warm, is turbid. It should be warmed before using. Only one, or at most two tumors, should be treated at one sitting. If there is much pain, hot sitz baths, opium and belladonna, or atropine should be given. The anus should be covered with a pad of soft cotton or gauze smeared with vaseline. The bowels should be kept loose by sulphur in some form, either with cream of tartar or in the compound licorice powder. Weyth & Bros. make a very elegant tablet containing five grains each of sulphur and cream of tartar, which is a desirable form for administration.

CASE I.—Mr. S——, of Kansas City, Mo., laborer, employed in lifting and loading freight into cars at the freight depot, came to me February 21. His piles were four in number, ulcerated, inflamed, bleeding, and so sore that he could not work. He absolutely refused operation under anesthesia, and had tried many forms of ointments. I asked for two months to cure him, which he accepted. I kept him in bed one week, applying hot fomentations, when he came to my office for treatment.

After brushing the parts with cocaine, and placing a hot, moist towel against them, they came down readily, with a little straining, bleeding freely. I selected the worst looking one, and after five minutes spent in slowly injecting about twelve drops of the solution, had the pleasure and satisfaction of seeing it turn a dull gray color and shrink down. He returned every five days and was injected four or five times at intervals of five to ten days. He resumed work after the first injection, keeping the parts covered into the following:

℞ Fl. ext. hamamelis, ʒ i.
Powdered opium, ʒ ss.
Per-sulph. iron, ʒ i.
Vaseline, ʒ j.

Without further incident he continued his work and treatment, and was discharged perfectly cured. He is paying his bill by monthly instalments, and each month expresses his delight at his easy cure. Should a method so useful be avoided because, forsooth, the ignorant quack has used it?

The clamp and cautery is a valuable method where the growths can be removed at one sitting under anesthesia. I wish to say here that I much prefer

to operate under chloroform upon these cases, for the following reasons:

1. It is more pleasant for the operator, and he can do better work under general than under local anesthesia.

2. The sphincter can be widely dilated, which alone is sometimes sufficient to cure the case, and always aids materially in cure by any method.

3. It is all done at one sitting, and the cure is thus more rapid and satisfactory.

I present the instruments used in the operation. The cautery is a Paquelin, and is at present charged with gasoline from the grocery. It works all right. The clamps are the pattern of Smith, Kelsey and Gant. I believe the Gant clamp is best. I like it best. I have operated with only a tissue forcep for a clamp, and succeeded, but it is not powerful enough to crush the tissue into a firm pedicle. It is best to divide the skin and mucous membrane at the base, fit in the clamp, close it, cut off the tumor with curved scissors, and roast the stump with the cautery at red heat. There is need to see that not only is the cut edge seared, but that the stump is hardened by the heat. The after care and dressing is the same as in case of injection. The patients go about in three or four days, and are entirely well in as many weeks, often in much less time.

The operation by ligature is the next to be considered, and is adapted, like the foregoing, to all severe cases of internal piles where excision under chloroform is allowed. The patient's bowels are emptied the previous day and cleansed by enema a few hours before operating. When anesthetized he is placed in lithotomy position, the sphincter well dilated and the skin and mucous membrane divided, a curved needle threaded with strong silk is passed through the center of the base, the needle cut off, and the two remaining ligatures tied both ways about the tumor, sinking the thread into the line of incision.

CASE II—*Clamp and Cautery.*—Mr. G——, farmer, had old hemorrhoids for six years. Was in bed with an attack of the inflammation of the tumors, and had been for a week. Under his doctor's care he was treated a few days with hot fomentations and laxatives. The soreness, however, did not disappear. He accepted offer of operation, and was anesthetized August 16th. Three stumps were made, each in succession being brought down and the base encircled by an incision running through the mucous membrane and skin. To each in turn the clamp (Kelsey's) was applied, and the tumor cut away with curved scissors. An assistant meanwhile was preparing the cautery, and the stump was immediately and thoroughly seared. The patient had retention of urine, and suffered some pain the first thirty-six hours, but the parts were kept smeared with vaseline containing belladonna and carbolic acid and one-fourth grain morphine administered hypodermatically. On the 20th he was in the yard, and on the 22nd, seven days after operating, rode to town in his wagon. The bowels were kept loose with compound licorice powder at bed-time. His recovery was perfect.

CASE III.—Mr. G——, of Stockton, Mo., had been a severe sufferer from piles for about three years. As often happens, much of the pain was caused by a fissure, though attributed to the pile tumors. Operation was accepted and performed August 21. The bowel was prepared by his doctor, Dr. E. A. Smith, the day before, and an enema given an hour and a half before the operation. Under anesthesia the anus was thoroughly dilated and the tumors brought down. Each was in turn grasped by the pile forcep, and the base encircled with a cut running through the skin and mucous membrane. The curved needle was then passed through the base of the tumor and a double silk ligature drawn through, the needle cut off, and the two ligatures thus formed carried, one forward, and the other backward, and securely tied, sinking them well into the cut. The tumor was then cut off. The fissure was curetted, the sphincter again stretched and the

rectum, which was much ulcerated and bleeding, packed with iodoform gauze. The packing was removed in thirty-six hours, and the parts smeared with carbolized vaseline and a pad of gauze placed over it. Two ligatures came away the fifth day, and the third on the seventh day. Three weeks later the doctor wrote that the man was well and could walk, work, and sit down without pain, and bowel movements were free and painless.

DANGERS—

1. *Injection Method.* — Extensive slough, and pain from inflammation of cellular tissue beyond the pile.

2. *Ligature.*—Retention of urine; swelling of parts with pain; tetanus.

3. *Clamp and Cautery.*—Retention of urine; pain and swelling; free hemorrhage in twelve to twenty hours; tetanus.

4. *All.*—Shock from operation; secondary hemorrhage.

I have never seen serious trouble or death follow an operation for hemorrhoids.

1018 East 15th Street.

---

**A Practical Course in Urinalysis.**

Beginning with April the 15th, 1898, Dr. Theodore W. Schaefer, Professor of Chemistry in the University Medical College, 913 East Tenth Street, Kansas City, Mo., will give a course of ten lessons in Urinalysis to practicing physicians. The fee for the course is ten dollars. The course will be demonstrated by actual work on pathological specimens of urine with the aid of the microscope and chemical tests.

N. B.—Samples of pathological urine examined microscopically and chemically for physicians. The fee for such an examination is from five to ten dollars.

For further information, address

THEODORE W. SCHAEFER, M. D.,
906 Main Street, Kansas City, Mo.

**Papine.**

BATTLE & Co.,
CHEMISTS' CORPORATION.
2001 Locust Street,
St. Louis, Mo., March 4, 1898.

Dr. A. M. Ritter, of Milo, Ohio, January 29th, 1898, writes: "I wish to speak especially of the merits of Papine, as an analgesic and sedative. I have had success with it when all other remedies of like character had failed. One case in particular of intestinal indigestion, in a child twelve months old, attended with a great amount of pain, and extreme nervousness, and insomnia. The remedy worked like a charm in relieving pain, and giving rest. The remedy was given in five-drop doses to begin with, as required to give rest and relieve pain. Papine was used in this case for at least six months, in increasing doses, without doing the least harm. It has been now three months since Papine has been discontinued, and the child is in perfect health. I consider Papine one of our most valuable remedies as a pain reliever and nerve sedative in well-selected cases.

**Antitoxin and Mortality.**

Prior to the introduction of Anti-Diphtheritic Serum, the mortality from diphtheria at the Harper Hospital, Detroit, averaged for a number of years forty per cent. According to the thirty-fourth annual report of the Hospital authorities, as published in the February number of the *Harper Hospital Bulletin*, page 73, 141 cases were treated at the Hospital during 1897, with the following results:

| | Cases | Deaths |
|---|---|---|
| Ordinary Diphtheria | 115 | 1 |
| Laryngeal Diphtheria | 26 | 6 |
| | 141 | 7 |
| Excluding two cases Moribund on Admission | 2 | 2 |
| | 139 | 5 |
| Mortality under Antitoxin Treatment | | 3.6 per cent. |

The antitoxin employed exclusively in Harper Hospital during 1897, was the Anti-Diphtheritic Serum of Parke, Davis & Co 's Biological Department, and the remarkable reduction displayed in the death-rate reflects the highest credit on the efficacy of this matchless product.

**Pinus Canadensis.**

DR. C. MORROSA, 1045 Mission St , San Francisco, Cal., says: "I have used S. H. KENNEDY'S EXTRACT OF PINUS CANADENSIS (WHITE) in one case of gonorrhœa. A lady had a discharge for months and had been treated with iodine crystals in water as an injection with no effect except to soil her clothing, I gave her a bottle of S. H. KENNEDY'S WHITE PINUS CANADENSIS giving directions for use as injection internally, gave fluid ext. prunus virg as a tonic. She lives in Alameda, and only yesterday she sent me some other sufferers, telling them I cured her. I will say in conclusion that your preparations are good. I have used them in some minor cases that I did not think worth while noting at the time, always with success.

**Polk's Directory.**

POLK'S MEDICAL AND SURGICAL REGISTER OF THE UNITED STATES AND CANADA is now undergoing its fifth revision. Physicians who have not given their names to the canvassers are urged to report to headquarters at once, giving full information. Address R. L. Polk & Co., Detroit, Mich.

# Kansas City Medical Index.

HERMAN E. PEARSE, M. D., EDITOR AND PUBLISHER.

1018 East Fifteenth Street, KANSAS CITY, MO.

TERMS: $1.00 PER YEAR, IN ADVANCE. SINGLE COPIES, 10 CENTS.

FOREIGN SUBSCRIPTION TERMS:

England, 5 shillings; France, 6 francs; Germany, 5 marks; Japan, 1 yen; Holland, 3 florins.

## EDITORIAL.

### The American Medical Association Meeting next June.

The indications now are for a most successful meeting of our American Medical Association. One of the most important matters in connection with the meeting has been the question of railroad rates. This has been very fortunately settled by the action of the Western Passenger Association last week in announcing an open rate of one fare plus $2.00 for the round trip. This will insure a full attendance, in so far as low rates can do so.

The preliminary programs are in and show a tremendous amount of work brought forward by the best of our members. All are interested and at work and a scientific program of more than usual excellence and value may be expected. Thus is the question of the excellence of our scientific program assured.

There remains only the question of accommodation and entertainment at Denver. The editor has spent many days in Denver and knows whereof he speaks when he says: All will be well cared for; each will be well fed; none will lack a bed or a meal and no one will be charged more than a reasonable price for what is given him, recent experience at Philadelphia and the explosion of vague hysteria from the *New York Medical Record* to the contrary, notwithstanding.

The *Colorado Medical Journal* says: "We regret that the editor of the *New York Medical Record* has had some misunderstanding with the Brown Palace Hotel management as regards rates; and the former, through his official position, has seen fit to criticize the Denver hotel business in general, and to make statements about the hotel rates that are to be in force during the meeting of the A. M. A., which are greatly in error. If there is one thing about the Philadelphia meeting that the local committee here wish to correct in our June meeting it is the question of hotel rates, which

the slang term 'hold up,' would well apply to as regards the way the visitors were treated in that city, and the committee here have guarded well against that disagreeable feature by making definite business arrangements with the Denver hotel men, whereby reduced rates have been made and will be kept. We hope the readers of the *New York Medical Record* will investigate for themselves before they allow themselves to be scared away from the Denver meeting by the article referred to."

There is no fear of excessive charges by the Brown Palace Hotel (one of the finest and most comfortable in the world) or any other Denver hotel.

The Burlington, Missouri Pacific and Rock Island roads will run special trains. The Union Pacific is not yet in evidence but may have one. The Santa Fe with its beautiful road bed and its perfect connections will carry many and should be a favorite to those who care for the ride by the foot hills. Away for Denver June 6 to 10.

## EDITORIAL NOTES.

### Methelene Blue.

This agent has been lately used in chronic malaria, chronic sciatica, rheumatism, chronic albuminuria, locomotor ataxia, etc., with some success. The drug must not be confounded with methyl blue or with fuchsin. The drug to use is methelene blue or roseaniline hydrochlorate; it is given in doses of one-fifth to three grains three times a day. As high as sixteen grains per day have been given, coloring the urine, saliva, sweat, and eye humors blue.

### Baby Murder in New York.

We learn from an eastern journal that the bodies of twenty dead babies were found in the streets of New York during the month of January.

### Another Case of Bombast.

A new and *very* ethical medical journal which "stands up so straight it falls backward" has set apart a liberal space to abusing its fellows who are not "ethical" in the choice of their advertisements. It says on a certain page that "The advertising of medicines of secret composition is the disgrace of medical journalism and all physicians who have the honor and dignity of their calling at heart, should demand that it be stopped." On the *back of the same leaf* appears the advertisement of "Dioviburnia," an excellent medicine but of a composition unknown so far as the advertisement shows. It is followed *on same page* by one of "Mentholyptine." Oh! Consistency! etc.

### Rubber Bags for Intestinal Suture.

January 8th, 1898, Dr. Geo. Wackerhagen of Brooklyn, published in the *New York Medical Journal*, his discovery of the inflatable rubber bag for use in end to end anastomosis of the intestine. He says he conceived the idea in December, 1897. On the same day, January 8, 1898, Dr. W. S. Halstead published the same discovery which he had made independently of Dr. Wackerhagen, in the *Philadel-*

*phia Medical Journal.* Each claimed to be the "original discoverer." Our friend, Dr. Emory Lanphear at once wrote east and informed the editor that neither was the first to make the discovery as Dr. Francis Reder, then of Hannibal, now of St. Louis, had published in the *International Journal of Surgery*, a paper describing this method in 1892, and had read it before the Tri-State Medical Society. Dr. U. C. Lynde, of Buffalo, N. Y., now proves that he used the same devise in 1897. Verily, there is nothing new under the sun.

---

**Retroflexion of the Uterus.**

Dr. Hunter Robb says in his recent article on "Retrodisplacements of the Uterus" in the *Philadelphia Medical Journal* that pessaries and tampons are of use in displacements when the vaginal outlet is intact and when no serious adhesions or inflammatory processes are present. He sums up as follows: "In my experience *if the retrodisplacement causes no symptoms it may be ignored.* In proceeding to treat the retroflexion, the general health of the patient should first be attended to and the causes of the displacement should next be treated. Only after this should the organ be replaced, after which it may be retained in position by appropriate methods (pessary and tampon). When only trifling adhesions exist reposition is best brought about by the bimanual method, the sound or repositor being employed but rarely. When the uterus is firmly bound down and when serious disease of the appendages is suspected no attempt should be made to replace it by taxis. When the retrodisplaced uterus is adherent, efforts should first be made to break up the adhesions by means of massage. Alexander's operation should only be performed after all these means have been tried without success. This procedure is not applicable to cases in which the uterus is adherent or diseased, or when there is any abnormality in the condition of the pelvic peritoneum or adnexa. Lastly, when dense and persistent adhesions exist, celiotomy should be performed, the adhesions broken up, the uterus brought forward and a properly-fitting pessary placed in position, or after breaking up the adhesions and bringing it forward we may fix the uterus to the abdominal wall."

---

# CHALK TALK.

BY THE EDITOR.

---

**The Triangle Bandage.**

The triangle bandage is a valuable one to the general surgeon, and one much neglected. It was brought to the notice of the world by Prof. Esmarch, of Germany, and bears his name. It is easily made from muslin, a large towel, a napkin, etc., although strong, unbleached muslin is best. It is made in the shape shown in Fig. I, (*A*) being the base,

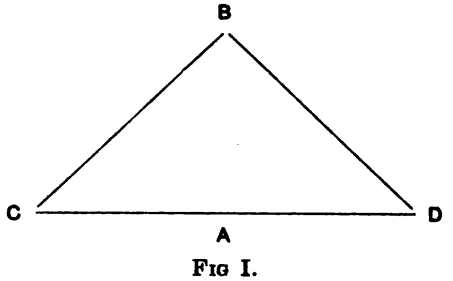



FIG I.

(*B*) the apex, and (*C* and *D*) the ends; "basal ends" they are called.

The following description of the appearance and application of this excellent bandage to the head, comes from "Prompt Aid to the Injured," one of Appleton's books:

"*Head* (Figs. II and III).—The base (*A*) is placed downward over the brow, with the apex (*B*) at the nape of the neck. The basal ends (*C* and *D*) are carried backward above the ears and crossed over the apex *below* the external occiptal protuberance, the "bump" on the back of the head; this prevents the bandage from slipping upward; the basal ends are then returned to the front and tied, the apex being turned upward and pinned to the body of the bandage."


FIG. II.

We show in Fig. II the appearance of the dressing complete. Fig. III


FIG. III.

shows how the dressing appears from behind.

We shall show in next issue the application of this bandage to the knee, shoulder, and other parts.

**The Four-Tailed Bandage.**

From the same excellent work we take the following description of the four-tailed bandage. This useful little appliance can be used, as suggested by the ingenuity of the surgeon, in many other ways, and is always a pleasure and a satisfaction.

"The FOUR-TAILED BANDAGE is made of a strip of muslin about one yard and a half long and four inches wide, folded and torn from the ends to within two inches of the center of the bandage. One pair of tails is usually made broader than the other. One purpose of this bandage is to support the lower jaw after a fracture or dislocation. It is to be applied by placing the center of the bandage against the chin, with the wide tails below, when the latter are turned upward and tied on top of the head; the upper or narrow tails are carried backward and tied at the nape of the neck (Fig. IV); two handkerchiefs, each folded in the form of a cravat, may be used for this purpose. A four-tailed bandage, for the purpose of protection and retaining dressings about the head can be made of a piece of muslin, about one yard and a half long and one foot or more in width, folded, and torn from the ends to within six inches of the center. The bandage is placed on the head, the anterior tails being carried backward and tied at the nape of the neck, while the posterior tails are tied under the chin. If it is required that the bandage should be applied to the back of head, the anterior or upper tails are tied beneath the chin, while the posterior or lower tails are tied upon the forehead. A four-tailed bandage may also be used at the knee. It should

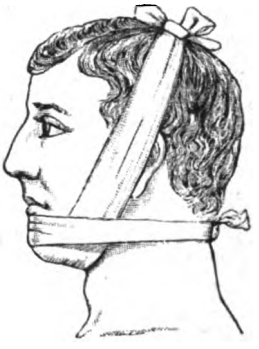


FIG. IV.

be made of a strip of muslin about eight inches wide and one yard long, and applied by placing the center of the bandage over the patella; the upper tails are carried backward, crossed behind the knee, then brought forward and tied in front below the patella; the lower tails are manipulated in a similar manner, but tied above the patella.

## SOCIETY PROCEEDINGS.

### Jackson County Medical Society.

Regular meeting was held in the hall in Masonic Building, Feb. 24, at 8 P. M. Dr. Franklin Murphy was elected secretary to fill the vacancy made by the resignation of Dr. C. M. Fulton.

DR. H. E. PEARSE presented a case of atrophy of the supra and infraspinatus muscles (of the right shoulder). The man had been a fireman for a stationary engine and had used the arm severely. He noticed about six months ago that the arm was powerless in attempting to carry the hand behind the head. These two muscles are supplied by the supra scapular nerve which passes down the neck under the edge of the trapezius, thus exposed to injury in heavy work that calls this muscle into action. It supplies only these two muscles. The case was one for further observation, meanwhile hypodermic injections of supplied nutrition with massage were recommended. In the discussion Dr. Hanawalt said his impression was that the trouble does not come from injury to the nerves supplying the parts but rather to muscular injury, but a closer examination of the patient might cause him to change his opinion.

DR. WARD made a talk on his method of performing vaginal hysterectomy. He said:

"Too much pains cannot be taken in preparing patients for this, one of the most difficult, and yet when skillfully done, one of the safest operations in surgery. Not less than twenty-four, and better forty-eight or seventy-two hours of bathing, dieting and stimulating the patient should be enforced. Vaginal douches with some antiseptic solution should be used three or four times prior to the operation, and at the time of operation the vagina should be thoroughly dilated and scrubbed with a strong creolin solution. I am opposed as a rule to shaving the entire pubis, because it is unnecessary and embarrassing to women of refinement. All that is necessary in most cases is to shave or clip with scissors so much of the hairy growth as would be in the way of the operation.

"Two assistants are necessary for rapid work; one to stand on either side of the patient while the operator sits in front. A trained nurse looks after the irrigating water and assists the operator in threading his pedicle needles, etc.

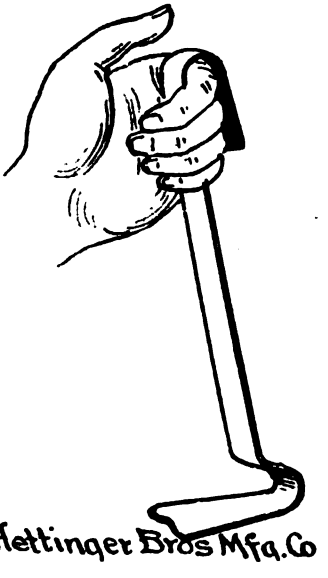



FIGURE I.

Anterior retractor; is light, long, and easily held.

"The patient is placed in the extreme lithotomy position with the buttocks brought down to the end of the table.

"The question of proper retractors has been one that has given me a great deal of anxiety, because those furnished by instrument makers have been so large and clumsy that in some cases of narrow vagina no room is left for manipulation when they are in place. I have recently had made by Hettinger Bros., some retractors, which in my experience meet every indication, and remove all the objections before mentioned.

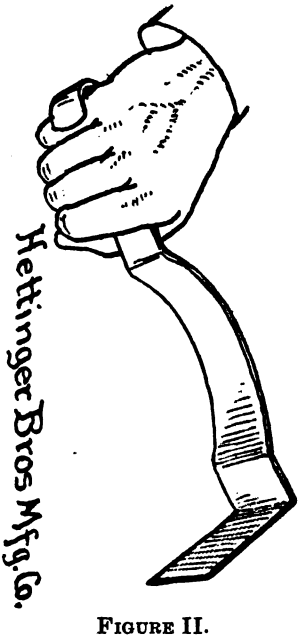



FIGURE II.
Lateral retractor, is light, broad, curved to avoid the buttocks or thighs, and easily handled and held.

The perineal retractor which I have used for a number of years is one made by a firm in Columbus, Ohio, and is self retaining and a great success in all operations of this kind.

"The incision separating the cervix from the vaginal vault, is always done with the scalpel. The separation of the uterus from this on is done with a dull dissector and the fingers. As soon as the uteras has been properly separated so that the uterine arteries can be reached, a ligature is passed around first on the left side, tied and one end cut close to the knot while the other end is left long, grasped with a forceps and then the forceps is thrown onto the abdomen where it remains until another ligature is tied on the same side when the same steps are repeated. After the left uterine artery is ligated the cervix is severed from the ligated tissue with the scissors and then the right side is treated likewise. The uterus is pulled down lower each time, and after tying not less than two and perhaps three ligatures on each side the peritoneum in front is opened and with the index finger carried to the fundus of the uterus as a guide, a four-pronged hook is inserted into the extreme fundus of the uterus and that organ is antiverted and brought out through the incision. The broad ligament is then ligated from above downwards, first on the left side until it is completely severed, then on the right side in like manner. When that portion of the operation is completed usually there are four and sometimes five ligatures on each side. After thorough irrigation with hot normal salt solution, the anterior fold of the vagina and the peritoneum are evenly adjusted and grasped by a forceps the posterior fold and peritoneum in like manner with another forceps, then the ligatures on that side are drawn taut so as to bring down the pedicle of the broad ligament and at the same time the forceps are carried up high so as to force the vagina up its extreme length, then with a curved needle in a needle carrier the anterior and posterior vaginal vault and the peritoneum corresponding are firmly sutured so as to hold the ligatures entirely in the vagina. The opposite side is treated in the same manner which naturally leaves a small space in the center of the vault for drainage, if drainage is desired, if not the peritoneum may be entirely closed by the use of the sutures as described. Nothing now remains but to insert little or much, as is found necessary, of iodoform gauze in the vault of the

# CORDIAL

# PAS-CARNATA.

MERRELL.

This preparation contains all the active medicinal constituents of Passiflora Incarnata in concentrated form, and is the result of an extended investigation in our Laboratory. It is the most eligible form for exhibiting the valuable properties of the drug, since from it we have succeeded in eliminating the inert principles invariably present in ordinary preparations on the market.

## TESTIMONIALS.

### Spasm in children. Nervousness and insomnia.

Dr. McAdow reports: "I have prescribed the Cordial Pas-carnata in several cases of threatened spasm in small children. In my hands it has proven a splendid remedy. A case of nervousness and insomnia in an old lady, a few doses acted like a charm."

### In uræmic convulsions.

Dr. C. P. Hockett writes: "Cordial Pas-carnata proved a boon to me in a case of uræmic convulsions."

### Insomnia from physical exhaustion.

Dr. Samuel C. Smith states: "Your advertisement in the *Medical Mirror* for November, page 26, and referring to Cordial Pas-carnata excites in me wonder that a preparation of this wide-spread usefulness has not been introduced to the medical profession before this. The therapeutic properties of the drug have been known to me for several years. It is first, a nerve sedative; second, a nerve tonic; a classification which though strange, is nevertheless true. It is undoubtedly a hypnotic and acts as such in insomnia arising from physical exhaustion."

### Teething children.

Dr. G. Spiegel writes: "Your agent visited my office, and, among other preparations, recommended to me your Cordial Pas-carnata. A patient was announced. A baby was brought in crying from restlessness and from teething. Here, I thought to myself, was an opportunity to try the Cordial-Pas-carnata. I asked your agent for a sample, administered it on the spot with almost immediate beneficial results."

### Sleeplessness of heart disease.

Dr. H. Neal writes: "A few days ago your agent kindly left me a sample of Cordial Pas-carnata. I have used this in a case of sleeplessness of heart disease in which other remedies produced no effect. The Cordial Pas-carnata brought such happy results that I shall continue to use it wherever indicated."

### Insomnia of nervous temperaments.

The following personal letter, the original of which is on file in our office, is valuable testimony: "I am in receipt of your favor of the 6th, also the box of Cordial Pas-carnata recently ordered, for the prompt shipment of which you will kindly accept my most sincere thanks. Your Cordial Pas-carnata has become a household necessity with both my wife and myself. We are both of a nervous temperament and troubled with insomnia, and up to date I have been unable to find anything that will equal the Cordial Pas-carnata in the treatment of the above trouble."

### By all means—try it.

L. B. Downing, druggist, writes: "In June I ordered your Fluid Extract Passion Flower as an experiment, for a son of 12 years, who has made very rapid growth, and was at the time very nervous, and several physicians had tried in vain to help him, one an uncle, in whose family he staid a month. My wife *happened* to see your circular on Pas-carnata, and on consulting the doctors who had treated him, they said, 'by all means try it.' The result was truly marvelous There was a change for the better in four days. Facial and shoulder muscles were twitching when we commenced using it. In a few days they disappeared, and on 15-drop doses three times a day he keeps all right, apparently. I shall speak a good word for the medicine, as I have already done. Will you please send me some circulars to give to physicians."

### Nervous irritation in women and children.

Dr. Jas. R. Dickens writes: "Your agent left with me a sample of your Cordial Pas-carnata, a preparation entirely new to our physicians. Its use thus far has not been extended; but as a remedy for allaying nervous irritation, especially in women as well as teething children, I find the Cordial meets a want in my practice which I have long desired to fill."

# The Wm. S. Merrell Chemical Co.

CINCINNATI. NEW YORK.

☞ SEND FOR SAMPLES AND MENTION THIS JOURNAL. ☜

vagina, the quantity to depend largely on the amount of oozing, which is sometimes quite troublesome. The ligatures are now removed from the forceps and tied in a single loop for the accommodation of the nurse in the after care of the patient. The usual dressings for operations of this kind are used.

"The patient after this operation does not sustain any shock because but little blood has been lost. In other words, the patient convalesces from the hour she is put in bed and there is usually but very slight suffering. The length of time that the gauze is to be left in-situ, is, in my judgment, not more than forty-eight hours. The gauze is used largely as a hæmostat to control the oozing from capillary veins and its office is practically ended when all danger of this kind is over. I usually have the nurse introduce gauze loosely into the vagina after this first packing has been removed in order to insure cleanliness more than for any other reason. The ligatures if properly applied and of proper material, namely, very small silk, will come away as a rule in ten or fifteen days. It is well to have the nurse use gentle traction once or twice a day after the first three or four days. This tends to prevent the ascension of the ligatures into the pelvis and insures more prompt loosening of these now useless strings. As soon as the vault is thoroughly united antiseptic douches should be used morning and evening.

"There is no reason for keeping the patient in bed longer than twelve days, and no special objection to having her sit in any easy chair even sooner. Three weeks is the average time a patient should remain in the hospital.

"Nothing original is claimed in this discussion of vaginal hysterectomy by the ligature method, except, perhaps, the special manner of carrying the vaginal vault up high and uniting it by sutures to the broad ligament in such a manner that the natural length of the vagina is retained.

"While I do not care at this time to say any harsh things against the clamp method for hysterectomy, it seems to me to be so extremely cruel and unsurgical that no woman should be subjected to it under any circumstances, if possible to avoid it."

DR. H. C. CROWELL said that there were some objections to offer to Dr. Ward's practice. Every individual surgeon has his own plan in operative procedure, and he usually follows that which serves him the best purpose. Regarding shaving, he believes that most cases should be shaved; others may be operated on without the necessity of shaving. The principal thing is to get the external parts absolutely clean by some means. Regarding the method of securing the vessels, the clamp is undoubtedly the easier of performance, and he could see no objection to its use. With a normal-sized uterus and plenty of room, the use of the ligature may be advised. There is an advantage in the clamp that cannot be obtained with the ligature, which is the crushing and destroying of suspicious tissue that may be infected. He suggested that Dr. Ward used many unnecessary instruments. He believed that iodoform-gauze placed in the cavity after the operation should be allowed to remain five or six days, or longer.

DR. A. L. FULTON said the operation described was the first used in vaginal hysterectomy. He used it fifteen years ago himself, but it seemed to be replaced by other methods.

DR. BINNIE—One should not make use of too much purgation or starve the patient, as it weakens too much. He preferred the clamp method.

DR. AUSTIN wished Dr. Ward to point out the points of originality in his methods.

DR. PEARSE spoke of hysterectomy from the patient's side. The removal of a diseased uterus did not necessarily involve the removal of the ovaries. Tubes should follow the uterus, but the ovaries are of benefit to the woman's economy and should be left where possible. The remarks of Dr. Crowell as to the removal of

gauze were the proper thing. He endorsed them fully.

He complimented Dr. Ward on the originality and perfection of his retractors and other instruments. They showed a progressive spirit and good sense in applying the principles of mechanics to the work in hand.

DR. WARD in closing said this operation was far from being discarded. He did not claim originality but simply described his method of operating.

Adjourned.

[The proceedings of the Henry County Medical Society, the Southeast Kansas Medical Society, the New York Academy of Medicine and the College of Physicians of Philadelphia will appear in next issue, being crowded out of this issue.—EDITOR.]

---

**New York Academy of Medicine.**

Section in Orthopædic Surgery.

Meeting of December 17th, 1897.

DR. A. M. PHELPS read a paper entitled "A Consideration of Some of the Pathological and Mechanical Problems of Hip Disease." He presented the view that Nature attempted to repair the lesion producing hip disease by inflammatory action which was a normal process of repair until the inoculation of germ life which marked the beginning of disease in the area of inflammation. The absence of inoculation gave rise to ephemeral cases of hip disease which rapidly recovered without deformity or disability, but inoculation gave rise to the ordinary type of the disease. If the phagocytes were weakened by the strumous condition of the patient, they failed to destroy the germs. If, however, germ life was destroyed, repair went on and the parts were restored to their normal condition. Cavities and foci produced in the course of hip disease by the slow growth of the bacilli of tuberculosis might be inoculated by the rapidly growing pyogenic cocci when a hot and possibly painful abscess appeared and called for the knife and drainage. The adduction flexion and inward rotation attending the third stage found a mechanical explanation in the fact that when the limb passed twenty-five degrees of flexion the adductors became internal rotators, the external rotators became abductors and the tensor vaginæ femoris became a powerful inward rotator. In the application of mechanical treatment it should be remembered that the powerful groups of muscles acting upon the thigh did not act on an axis with the shaft but nearly on a line parallel with the axis of the neck of the femur. Lateral traction, therefore, should be made in the line of the axis of the femural neck and not of the shaft.

DR. G. R. ELLIOTT said that in hip disease we had a depraved process. The whole system was at a low ebb that tended to favor the development of the disease. He thought that this condition of inactivity required the use of some form of apparatus which did not, as all the instruments now in use did, subject every part of the child's body to great expense for the sake of the hip. The ideal splint of the future would not lock up so much of the body by apparatus but would fix only the diseased joint.

DR. R. H. SAYRE advocated the use of traction to fix the joint, give it physiological rest and relieve the pressure to which the diseased bone was subjected. He thought that it was difficult to apply lateral traction by a splint, but in bed lateral traction was easily applied and added to the patient's comfort. In children, however, in whom the neck was nearer in line with the shaft of the femur than in the adult, he believed that longitudinal traction was sufficient. He thought it well to apply massage to overcome the muscular atrophy of disease, but it took a great deal of care to limit the application to the sound part and not interfere with the inflamed joint.

DR. T. H. MANLEY held that all pus accumulations about a joint should be evacuated early and thoroughly. He asked Dr. Phelps's opinion of the intra-articular injection of solutions of iodoform.

**When prescribing PILLS OF AND KIND secure them perfectly soluble and quickly assimilable by specifying "W. R. W. & CO'S"**


## PIL. CHALYBEATE

(WARNER & CO.)

Proto-carb of Iron, 3 grains. Dose—1 to 3 pills.

(Wm. R. Warner & Co's Ferruginous Pills)

Ferri Sulph. Fe $SO_4$ } Ferri Carb. Fe. $CO_3$
Potass. Carb. $K_2CO_3$ } Potass. Sulph. $K_2SO_4$

Per 100, 40 cents

FOR ANÆMIA SCROFULA

## PIL. CHALYBEATE COMP.

(WARNER & CO.)

Formula—Carb. Protoxide of Iron, gr. ijss.
Ext. Nuc. Vom. 1-8 gr.

ADVANTAGES—Does not constipate, is easily absorbed, is nerve tonic and quickly soluble.

Per 100, 55 cents.

RHEUMATISM INDIGESTION

## PIL. ANTISEPTIC

(WARNER & CO.)

Each pill contains
Sulphite Soda 1 gr. Salicylic Acid 1 gr.
Ext. Nuc. Vom. . . ¼ gr.
Dose—1 to 3 pills.

Pil. Antiseptic is prescribed with great advantage in cases of Dyspepsia attended with acid stomach and enfeebled digestion following excessive indulgence in eating or drinking. It is used with advantage in Rheumatism.

Per 100, 55 cents

RHEUMATISM INDIGESTION

## PIL. ANTISEPTIC COMP.

(WARNER & CO.)

FORMULA

Sulphite Soda, 1 gr. Powd. Capsicum, 1-10 gr.
Ext. Nuc. Vomica, ⅛ gr. Concent'd Pepsin 1 gr.
Salicylic Acid, 1 gr.

Try this Pill. Used in all cases where there is no well-defined malady, yet patient is not well.

Per 100, 55 cents

## PIL. SUMBUL COMP.

(WARNER & CO.)

Ext. Sumbul 1 gr. Ferri Sulph. Ext. 1 gr.
Asafœtida 2 grs. Ac. Arsenious 1-40 gr.

DR. GOODELL—"I use this pill for nervous and hysterical women who need building up."

This pill is used with advantage in neurasthenic conditions in conjunction with Warner & Co's Bromo Soda, one or two pills taken three times a day.

Per 100, $1.00

## PIL. LADY WEBSTER

(WARNER & CO.)

Pulv. Aloes, 2 grs. Pulv. Rose lvs. ½ gr.
Pulv. Mastich, 1 gr. M. ft. one pill.

***Lady Webster Dinner Pills.***

This is an excellent combination officially designated as Aloes and Mastich, U. S. P. We take very great pleasure in asking physicians to prescribe them more liberally, as they are very excellent as an aperient for persons of full habit or gouty tendency when given in doses of one pill after dinner.

Per 100, 25 cents

When the Potash Salt is preferred the Physician should prescribe **Warner & Co's Effervescing**

## BROMO POTASH

Each teaspoonful contains
Bromide Potash, 20 grs. Caffein, 1 gr.

**Prepared by WILLIAM R. WARNER & CO.**

Originators and Manufacturers of Bromo Soda, Bromo Potash, Triple Bromides and a full line of Effervescent Salts.

PHILADELPHIA NEW YORK LONDON

WM. R. WARNER & CO'S

# Quickly Soluble Tablets

FOR

# Hypodermic Medication

In compliance with repeated requests from the Medical profession to manufacture quickly soluble Tablets for subcutaneous medication, we respectfully call attention to the following list.

We desire to emphasize the statement, that in undertaking the manufacture of these delicate agents, we have devoted much time and labor in bringing them to a state of perfection; in this we have been assisted by the co-operation of our medical friends.

We claim (and a candid comparison will convince anyone) for our soluble Tablets, the following points of superiority, viz.:

1. They are quickly and entirely soluble.
2. They are permanent in form and accurate in dose.
3. They are safe, and rapid in action.

NOTE.—Our Tablets are put up in tubes containing twenty and packed in boxes of five tubes and in vials containing one hundred tablets. When ordering please specify WM. R. WARNER & CO.'S HYPODERMIC TABLETS, and describe style of packing.

| SOLUBLE HYPODERMIC TABLETS | Per Bottle 100 Tablets | Per Tube 20 Tablets |
|---|---|---|
| ACONITINE, Pure Cryst.....1-120 gr. | $ 70 | $ 18 |
| ANESTHETIC, Local. No. 1, ..... (Cocaine Hydrochlor 1-5 gr., Morphine " 1-40 gr., Sodium Chloride 1-5 gr.) | 1 40 | 32 |
| ANESTHETIC, Local, No. 2, ..... (Cocaine Hydrochlor 1-10 gr., Morphine " 1-40 gr., Sodium Chloride 1-5 gr.) | 85 | 21 |
| ANESTHETIC, Local, No. 3, ..... (Cocaine Hydrochlor 1-100 gr., Morphine " 1-40 gr., Sodium Chloride 1-5 gr.) | 45 | 13 |
| ANESTHETIC, Local, No. 4, ..... (Cocaine Hydrochlor 1 gr., Morphine " ⅛ gr., Sodium Chloride 1 gr.) | 4 05 | 85 |
| ANESTHETIC, Local, No. 5, ..... (Cocaine Hydrochlor ½ gr., Morphine " ⅛ gr., Sodium Chloride 1 gr.) | 2 55 | 25 |
| ANESTHETIC, Local, No. 6, ..... (Cocaine Hydrochlor 1-20 gr., Morphine " ⅛ gr., Sodium Chloride 1 gr.) | 85 | 21 |
| APOMORPHINE MURIATE.....1-20 gr | 60 | 16 |
| APOMORPHINE MURIATE.....1-8 gr | 1 00 | 24 |
| APOMORPHINE MURIATE.....1-12 gr. | 85 | 19 |

| SOLUBLE HYPODERMIC TABLETS | Per Bottle 100 Tablets | Per Tube 20 Tablets |
|---|---|---|
| ATROPINA SULPH.....1-50 gr. | 40 | 12 |
| ATROPINE SULPHATE.....1-60 gr. | 30 | 10 |
| ATROPINE SULPHATE.....1-200 gr. | 30 | 10 |
| ATROPINE SULPHATE.....1-150 gr. | 30 | 10 |
| ATROPINE SULPHATE.....1-120 gr. | 30 | 10 |
| ATROPINE SULPHATE.....1-100 gr. | 30 | 10 |
| CAFFEIN SODIO-BENZOATE.....½ gr. | 50 | 14 |
| CAFFEIN SODIO-BENZOATE ....1 gr. | 90 | 22 |
| CARDIAC TONIC, (Dr. Mann) ..... Morph. Sul. 1-12 gr. Atropin Sul. 1-250 gr. Strych. Sul. 1-134 gr. Caffein, 1-67 gr. | 60 | 16 |
| COCAINE HYDROCHLORATE 1-8 gr. | 50 | 14 |
| COCAINE HYDROCHLORATE 1-4 gr. | 70 | 18 |
| COCAINE HYDROCHLORATE...1-10 gr. | 45 | 13 |
| COCAINE HYDROCHLORATE....1-2 gr. | 1 30 | 30 |
| CODEIN PHOSPHATE .....¼ gr. | 60 | 16 |
| CODEIN PHOSPHATE..... 1 gr. | 1 00 | 24 |
| CODEINE SULPHATE..... 1-8 gr. | 60 | 16 |
| CODEINE SULPHATE.....1-4 gr. | 1 00 | 24 |
| CONIINE HYDROBROMATE 1-100 gr. | 30 | 10 |
| CONIINE HYDROBROMATE....1-50 gr. | 60 | 18 |
| CONIINE HYDROBROMATE....1-60 gr. | 50 | 14 |
| DIGITALINE, Pure.....1-100 gr. | 30 | 10 |
| DIGITALINE, Pure..... 1-60 gr. | 50 | 14 |
| DUBOISINE SULPHATE.....1-100 gr. | 50 | 14 |
| DUBOISINE SULPHATE.....1-60 gr. | 80 | 20 |
| ERGOTIN ..... .....1-6 gr. | 60 | 18 |
| ERGOTIN .....1-10 gr. | 30 | 10 |

| SOLUBLE HYPODERMIC TABLETS. | Per Bottle 100 Tablets | Per Tube 20 Tablets |
|---|---|---|
| ESERINE SULPHATE .....1-60 gr. | 80 | 20 |
| ESERINE SULPHATE.....1-100 gr. | 45 | 13 |
| HYOSCINE HYDROBROMATE 1-100 gr. | 65 | 17 |
| HYOSCYAMINE SULPHATE....1-50 gr. | 50 | 14 |
| HYOSCYAMINE SULPHATE.. 1-100 gr. | 40 | 12 |
| MERCURY COR. CHLORIDIN. 1-40 gr. | 30 | 10 |
| MERCURY COR. CHLORIDE.... 1-60 gr. | 30 | 10 |
| MERCURY COR. CHLORIDE 1-150 gr. | 30 | 10 |
| MORPHINE BIMECONATE .....1-3 gr. | 85 | 21 |
| MORPHINE BIMECONATE.....1-4 gr. | 70 | 18 |
| MORPHINE BIMECONATE.....1-6 gr. | 45 | 13 |
| MORPHINE BIMECONATE.....1-8 gr. | 35 | 11 |
| MORPHINE MURIATE.....1-8 gr. | 35 | 11 |
| MORPHINE MURIATE.....1-6 gr. | 40 | 12 |
| MORPHINE MURIATE..... 1-4 gr. | 45 | 13 |
| MORPHINE NITRATE.....1-4 gr | 90 | 22 |
| MORPHINE NITRATE.....1-6 gr. | 70 | 18 |
| MORPHINE NITRATE.....1-8 gr. | 55 | 15 |
| MORPHINE NITRATE.....1-12 gr. | 50 | 14 |
| MORPHINE SULPHATE.....1-8 gr. | 30 | 10 |
| MORPHINE SULPHATE.....1-6 gr. | 35 | 11 |
| MORPHINE SULPHATE.....1-4 gr. | 40 | 12 |
| MORPHINE SULPHATE.....1-3 gr. | 50 | 14 |
| MORPHINE SULPHATE.....1-2 gr. | 65 | 17 |
| MORPHINE AND ATROPINE No. 1, {Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-200 gr.} | 40 | 12 |
| MORPHINE AND ATROPINE No. 2, {Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-180 gr.} | 45 | 13 |
| MORPHINE AND ATROPINE No. 3, {Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-150 gr.} | 50 | 14 |
| MORPHINE AND ATROPINE No. 4, {Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-100 gr.} | 50 | 14 |
| MORPHINE AND ATROPINE No. 5, {Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-150 gr.} | 40 | 12 |
| MORPHINE AND ATROPINE No. 6, {Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-100 gr.} | 45 | 13 |
| MORPHINE AND ATROPINE No. 7, {Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-150 gr.} | 45 | 13 |
| MORPHINE AND ATROPINE No. 8, {Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-120 gr.} | 50 | 14 |
| MORPHINE AND ATROPINE No. 9, {Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-200 gr.} | 50 | 14 |
| MORPHINE AND ATROPINE No. 10, {Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-120 gr.} | 50 | 14 |

| SOLUBLE HYPODERMIC TABLETS | Per Bottle 100 Tablets | Per Tube 20 Tablets |
|---|---|---|
| MORPHINE AND ATROPINE No. 11, {Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-60 gr.} | 55 | 15 |
| MORPHINE AND ATROPINE No. 12, {Morphine Sulph. 1-3 gr. / Atropine Sulph. 1-120 gr.} | 60 | 16 |
| MORPHINE AND ATROPINE No. 13, {Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-150 gr.} | 75 | 19 |
| MORPHINE AND ATROPINE No. 14, {Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-120 gr.} | 75 | 19 |
| MORPHINE AND ATROPINE No. 15, {Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-100 gr.} | 75 | 19 |
| MORPHINE AND ATROPINE No. 16, {Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-240 gr.} | 75 | 19 |
| NITROGLYCERIN.....1-50 gr. | 30 | 10 |
| NITROGLYCERIN..... 1-150 gr. | 30 | 10 |
| NITROGLYCERIN..... 1-100 gr. | 30 | 10 |
| NITROGLYCERIN..... 1-200 gr. | 30 | 10 |
| NITROGLYCERIN, 1-100 gr. & STRYCHNINE.....1-50 gr. | 30 | 10 |
| PHYSOSTIGMINE SULPH. (See Eserine Sulph.).....1-60 gr | 80 | 20 |
| *PILOCARPINE MURIATE .....1-5 gr | | |
| *PILOCARPINE MURIATE .....1-8 gr. | | |
| *PILOCARPINE MURIATE.....1-20 gr. | | |
| *PILOCARPINE NITRATE .....1-20 gr. | | |
| *PILOCARPINE NITRATE.....1-8 gr, | | |
| *PILOCARPINE NITRATE.....1-4 gr. | | |
| SODIUM ARSENIATE.....1-30 gr. | 30 | 10 |
| STRYCHNINE NITRATE..... 1-150 gr. | 30 | 10 |
| STRYCHNINE NITRATE..... 1-100 gr. | 35 | 11 |
| STRYCHNINE NITRATE..... 1-40 gr. | 35 | 11 |
| STRYCHNINE NITRATE.....1-60 gr. | 35 | 11 |
| STRYCHNINE SULPHATE.... 1-150 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.... 1-120 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.... 1-100 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.....1-60 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.....1-20 gr. | 40 | 12 |
| STRYCHNINE SULPHATE.....1-30 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.....1-40 gr. | 30 | 10 |
| STRYCHNINE SULPHATE.....1-50 gr. | 30 | 10 |
| STRYCHNINE AND ATROPINE No. 1, {Strychnine Sulph. 1-50 gr. / Atropine Sulph. 1-150 gr.} | 50 | 14 |
| STRYCHNINE AND ATROPINE No. 2, {Strychnine Sulph. 1-30 gr. / Atropine Sulph. 1-120 gr.} | 50 | 14 |
| STRYCHNINE AND ATROPINE No. 3, {Strychnine Sulph. 1-60 gr. / Atropine Sulph. 1-150 gr.} | 50 | 14 |

*Prices on application


## Specify WARNER'S

# LITHIA WATER TABLETS

**A definite method of administering Lithia for Rheumatism, Gout, Uricemia and diseases of the Kidneys and Bladder.**

**ACCURATE. EFFICACIOUS. CONVENIENT.**

GARROD who was the first to introduce the Lithia Salts to the profession, for the treatment of rheumatism and conditions arising from excessive secretions of uric acid, uricemia, etc., writes:

"When given internally in doses of from one to four grains dissolved in water and repeated two or three times daily, it exerts a marked influence in cases where patients are voiding uric gravel, causing the formation of deposits to become less or cease altogether. In many instances in which I have administered it to gouty subjects the result has been to diminish the frequency of the attacks and altogether improve the condition of the patients. I am of the opinion that the salts of Lithium offer to the physician most valuable agents in these cases, as their alkalinising property is of the highest order, and their solvent for uric acid or urates far greater than that of any other agents."—*On Gout and Rheumatic Gout.*

**SUPERIOR TO PEPSIN OF THE HOG**

# INGLUVIN

( FROM THE VENTRICULUS CALLOSUS GALLINACEUS )

**A Powder—Prescribed in the same manner, doses and combinations as Pepsin.**

A most Potent and Reliable Remedy for the cure of

## Marasmus, Cholera Infantum, Indigestion, Dyspepsia and Sick Stomach.

It is superior to the Pepsin preparations, since it acts with more certainty, and effects cures where they fail.

## A SPECIFIC FOR VOMITING IN PREGNANCY.

**In Doses of 10 to 20 grains.**

**Prescribed by the most eminent Physicians in Europe and America.**

---

## TO PHYSICIANS.

It is with pleasure that we report to you the experience of eminent physicians as to the valuable medicinal qualities of INGLUVIN, and to its superiority in all cases over Pepsin.

### VOMITING IN GESTATION AND DYSPEPSIA.

I have used Messrs. Warner & Co.'s Ingluvin with great success in several cases of Dyspepsia and Vomiting in Pregnancy. In one case of the latter which I was attending a few weeks back, Ingluvin speedily put a stop to the vomiting, which was of a very distressing nature, when other remedies had failed.

ROBERT ELLITHERON, M. R. C. S., Lancaster House, Peckham Rye, S. E.

Dr. F. W. Campbell of Montreal, Canada, says that with INGLUVIN he cured three out of four cases of VOMITING in PREGNANCY.

Dr. C. F. Clark, Brooklyn, N. Y., has used INGLUVIN very extensively in his daily practice for more than year, and has fully tested it in many cases of VOMITING in PREGNANCY, DYSPEPSIA, and SICK STOMACH, and with the best results.

Dr. Edward P. Abbe, New Bedford, Mass., mentions a case of vomiting caused by too free use of intoxicating liquors; INGLUVIN was administered in the usual way—the effect was wonderful, the patient had immediate relief.

A gentleman living in Toronto, Canada, gives his experience. He says: I was suffering terribly from indigestion. I could eat nothing. Life was almost a burden to me. INGLUVIN was prescribed in five to ten-grain doses; the medicine was taken for about eight weeks. Result—a permanent cure.

In fact, were we to note all remarks of the profession and our experience in relation to this remedy, and report to you the cases in detail, we could fill a volume with expressions as to its great efficacy in the troubles for which it is recommended.

Yours, respectfully,

**Dispensed by all Druggists** WILLIAM R. WARNER & CO.

## CHOLERA INFANTUM

### TREATED WITH INGLUVIN.

The prevalence of Cholera Infantum, Cholera Morbus, and Diarrhœa, to a greater extent in the summer period, induces us to call the attention of the medical fraternity to the lately introduced remedy INGLUVIN. It has been used in practice with very happy results for a considerable time. We find indigestion generally at the bottom of the bowel complaints, which INGLUVIN has almost instantly corrected alone or in combinations. It is given in the following formulas with great advantage:

### INFANT FORMULA

℞. Ingluvin.....gr. xii.
Sacch. Lac.....gr. x
Misce et ft. cht. No. x.

Sig.—One every 4 hours.

℞. Aqua Calcis.....f℥ij.
Spts. Lavand. Comp.
Syr. Rhei. Arom..... āā f℥
Tr. Opii.....gtt. x.

Misce.—Sig.—A teaspoonful every 2 to 4 hours.

In inflammatory affections INGLUVIN is combined with Subnitrate of Bismuth, equal parts, and oleaginous mixtures with Ol. Terebinth, instead of Aqua Calcis. Should the evacuation be suddenly arrested, and Tympanitis supervene, follow with a dose of oil or magnesia, or injections. In many cases of sick-headache and indigestion the most happy results follow from the combining of INGLUVIN with Pv. Nuc. Vomica, the one-twentieth to one-tenth grain.

HOLLOWAY, ENGLAND, Dec. 29th, 1895.

DEAR SIRS:—I duly received the sample of INGLUVIN you kindly forwarded me at my request. I am very much pleased to inform you that the results achieved by it are most satisfactory. I prescribed one powder, 15 grains, twice a day, in case of obstinate vomiting during pregnancy; after taking six powders the vomiting and nausea had quite ceased, and the patient can now take her ordinary food with relish. I thank you for the sample, and beg to state that you can make what use of this letter you please.

I remain, yours faithfully, EUSTACE DEGRUTHER, L.R.C.P., L.R.C.S., etc.

DR. PHELPS said that filling a joint with an insoluble compound did more harm than good. If he found a joint in which there was fluid, he evacuated it.

DR. A. B. JUDSON said that the destruction of the head and acetabulum was often cited as an evidence of the bad effects of muscular contraction and of the necessity of making traction. He thought that this destruction was rather an evidence of the bad effects of the pressure made by the weight of the body, as patients with hip disease, if unmolested, were in all except the most advanced stages on their feet as much as well children. He believed that traction was the best method of promoting fixation and in painful stages it was indispensable, but that removing the weight of the body from the joint was also an indispensable part of the treatment and useful through far larger periods than traction.

DR. T. H. MYERS had made a careful study of the ephemeral cases and believed that the lesion, of whatever nature it might be, was in the bone itself. He would make a distinction between these cases and rheumatic, gonorrhœal or other affections of the joint cavity and ligaments. He could not recall any acute case of hip disease which had not been relieved by longitudinal traction alone.

DR. R. WHITMAN said that the breaking down of bone appeared to be the effect of a destructive process, aggravated by the friction of the diseased surfaces upon one another, by the weight and strain of use in the attitudes of deformity and by the muscular spasm which forced the diseased parts together. The intensity of the spasm was in inverse proportion to the fixation and rest that could be assured. When the patient was recumbent the most important means of fixing the joint was traction. The ambulatory brace should remove the weight of the body from the weakened part, but it was so ineffective in fixation that its use should be combined with splinting of the joint. He had always insisted that the hip should be slightly abducted.

[CONTINUED.]

## BOOK TALK.

TWENTIETH CENTURY PRACTICE. AN INTERNATIONAL ENCYCLOPEDIA OF MODERN MEDICAL SCIENCE. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XIII, "Infectious Diseases." New York, William Wood & Company, 1898.

The medical man of 1898, whose income will permit him to invest in "Twentieth Century Practice" is guilty of a grave sin of omission if he fails to do so. There have been other volumes before the thirteenth, that were much more valuable in practical every day work, but there have been none that equal the present volume in the depth of scientific study contained therein. The subject treated upon is infectious diseases and disorders, and the contributors to this volume include the brightest and best investigators along the lines of bacterial infection that have ever graced the medical profession in any century.

Dr. Vaughn has written in the first 140 pages very much that is new, even from this prolific writer, whilst the following 150 pages by Ernst on "Infection and Immunity," are fascinating by the clearness with which the subjects are elucidated.

Mr. Ernest Hart, of London, lately deceased, who has been noted for his study in hygiene has joined with Solomon D. Smith, of London, in discussing water-borne diseases, *i. e.*, typhoid fever, cholera, malaria, dysentary, diarrhœa and yellow fever.

Small pox, by John W. Moore, of Dublin, Ireland, occupies over one hundred pages, and the remainder of the book is devoted to the consideration of other infectious diseases, and the conditions which best tend to obviate them. It is surprising how much of the book is devoted to prophylaxis, and warns us that the doctor of the future will be the one who keeps his patient away from disease, and disease away from his patient.

# LITTLE ITEMS.

The new doctors are abroad.

Dr. W. K. Jones, formerly at Iola, Kan., is now at Bonner Springs, Kansas, as house surgeon.

Dr. Edwin Klebes, of Chicago, has discovered the ameba of yellow fever, or says he has.

Dr. Kirkpatrick celebrated the graduation of his third and last son this year into the ranks of regular medicine.

Dr. Mathews, of Carthage, visited commencement and witnessed the graduation of his son at the Kansas City Medical College.

The American Neurological Association will hold its twenty-fourth annual meeting in New York on May 26-27-28, 1898. Dr. John Punton, of this city is a member and will read a paper there.

Dr. Coe, of the *Medical Sentinel*. tells us that doctors who expect to practice in the Klondike must pass examination before the Board of Examiners of the Northwest Territory. Dr. Britt, of Banff, N. W. Territory is registrar.

Members of the American Medical Association are notified that Dr. Senn has offered a medal for the best essay on a surgical subject. Parties who wish to compete should send their contributions to Dr. J. McFadden, Gaston, Atlanta, Ga., immediately.

The *Philadelphia Medical Journal* tells us there are now 226 medical monthlies published in the United States at the present time. This is one for each five hundred practicing doctors, and if each journal has the circulation it claims, each doctor would receive about thirty-two journals each month. Then add to this the weekly and bi-weekly and the quarterly publications and the average goes higher yet!!

The Midland Ophthalmological Society held its regular meeting at the club rooms of the Coates House on March 14th, 8 P. M. Papers were read and discussed by Drs. Bannister and Lippitt, of Leavenworth Kansas, and Drs. Bellows, Dibble, Reyling, Thompson, Tyree and Sherer, of Kansas City, Mo., and Dr. J. W. May, of Kansas City, Kansas The Midland Ophthalmological Society meets regularly once a month for local members, and twice a year for all who may wish to attend. All are cordially invited to be present and take part in the proceedings of the meeting. A large number have already promised to be in attendance at the June meeting. The next annual meeting of the society convenes at the Coates House, Kansas City, Mo., June 3rd, 1898 There will be one day session, viz: Morning and afternoon, with a social evening. This meeting takes place on the third day of the Military Medical Convention, which is also to be held in Kansas City, Mo., and precedes by three days the American Medical Association, which is to be held at Denver, Colo.

# READING NOTICES.

**Acute Cystitis.**

Resulting from gonorrhœa and presenting symptoms of distress and pain over pubes, frequent and urgent inclination to micturate, urine cloudy and depositing slight amount of mucus on standing.

**Chronic Cystitis.**

Resulting from enlarged prostate, retained or altered urine, or from gout or nervous derangement—mucus or muco-pus rendering the urine more or less cloudy or opaque.

**Treatment.**

In addition to the mechanical treatment, usually essential in the management of disorders of this class, the administration of Lambert's LITHIATED HYDRANGEA is often of the greatest service. A practitioner of wide experience says: "I have used Lambert's LITHIATED HYDRANGEA on various persons affected with diverse and painful manifestations of chronic rheumatism, gout, lithiasis-urica, nephritic calculus and functional disturburances of the renal system, with excellent results, and I consider it a valuable remedy for normalizing the renal function, for promoting the active elimination of uric acid and to calm the congestive conditions of the kidneys and of the urinary mucous membrane."

**Pain in Otitis.**

Dr. George H. Powers, Professor of Ophthalmology and Otology in the University of California, San Francisco, in an article in *The Medical News*, writes as follows, in reference to the treatment of pain in otitis: "At my first visit I found a copious discharge of bloody serum from the ear with hardly a trace of pus. He suffered from severe cephalalgia, but there was no special tenderness in or about the ear, and no swelling. Thorough cleansing of the meatus with dry cotton relieved the pain in the head remarkably, and with a dose of antikamnia, ten grains, he slept some hours."

# RICH STRIKE IN COLORADO!

## White Quartz in Topeka Mine Containing Much Gold.

## ONE MILLION DOLLARS REFUSED.

The New York Sun in its mining news of December 13, reports a rich strike near Idaho Springs. The Sun says:

"One of the richest strikes of the year has recently been made in the old Topeka mine in the Central City district. A streak of white quartz has been encountered, from six to eight inches wide, running very heavy in free gold, some of which is in the form of nuggets. One piece of twenty pounds was estimated to be worth $400. The drift where this quartz has been discovered has been watched night and day, since the strike, to prevent theft of the ore, and as it is developed the streak appears to be widening and growing richer. An Eastern company obtained possession of the Topeka mine in June last. At that time it was considered an old mine containing only low-grade ore, that would pay only by careful management. The 800-foot level was extended about 800 feet by the new management, and an upraise was started, to connect with a new shaft. For sixty-five feet this new work opened a six-foot vein of fairly good pay-ore, and it was only when the hanging wall was reached by the new workings that this streak of gold-bearing white quartz was discovered. A distance of thirty-five feet has been made along this quartz formation, with the values remaining very high, and quite a large block of ground is now opened."

It is reported that $1,000,000 has been refused for this mine, which six months ago could have been purchased for $50,000.

The Topeka is one of the mines to be tapped by the United States Tunnel, which is considered by experienced mining men to cover richer mineral ground than any other in the United States. In the Denver Republican, the leading newspaper of the West, we find, among the news items, on Jan. 1, 1898, the following interesting report:

"The United States Tunnel is now on the journey through the gold-bearing lodes, which are now giving up a greater amount

of gold in one month than is expected from the Klondike for the year.

"In the Rico-Aspen case, a decision given by the United States Supreme Court definitely defines tunnel sites and rights, and by the decision it gives to the tunnel owners a good slice of the earth. A tunnel owns all lodes that may be discovered along its right of way; whether they have been cut by the tunnel or not does not matter. This decision, which has been rendered by the highest court in the land, makes the good tunnel—such as the United States, for instance—*more valuable than investments in railways, bonds and other lines of business.*

"This tunnel is now piercing the richest section of Clear Creek and Gilpin Counties, where in a like distance it will cut a larger number of known and working mines at greater depth than at any other mining point in the world. With the cutting of the lodes by such an undertaking it means the resumption of work on five times as many mines as are now being operated.

"For the past five years this gold belt of territory, which is not to exceed four miles wide, and covered only by this tunnel, had an actual production of ores, from the two counties, close on to $30,000,000.

"The tunnel passes through the Alps Mountain and comes to the treasure vaults of Quartz Hill, the mines of which have a record of millions of gold, with no sign of cessation and a constantly increasing output. No wonder that such a financial pool can be organized to assist in the greatest undertaking, in a mining way, of the closing days of the present century. It is impossible to make mention of the different veins that will be cut by this wonderful bore. There is hardly a big mine in either county, but that its vein will be cut at great depth."

In order to proceed with the development of the tunnel as rapidly as possible, and to at once erect mills and power-works, a limited amount of treasury stock, full paid and non-assessable, of a par value of $1.00 per share, is offered to the public at 50 cents per share. Annual dividends of 10 per cent, (this means 20 per cent on the present price) will surely be earned from the profits on transportation and milling alone. The fifteen mines owned by the company will earn almost unlimited dividends.

A couple of years ago, Bell Telephone, Boston and Montana, Osceola, and numerous other mining stocks could be purchased at a small fraction of their present price. Two years hence, United States Tunnel Stock will be selling at several dollars a share.

The Mercantile and Financial Times, the leading journal devoted to investment securities, says, October 30: "Among enterprises that may properly be commended to even the most conservative investors, is the United States Tunnel, Mining, Milling, Drainage and Transportation Company, identified with which are some of our best-known business men and financiers. It is not often that we can commend a Colorado enterprise so cordially as we can this one. It is as solid as the rocks through which the tunnel is being driven."

Don't miss this opportunity of a lifetime. Send to-day for maps and prospectus giving all details, or better send $5 00 for 10 shares, at once, and thereby reserve the right to buy 100 more shares at the same price within 30 days.

Make all checks and drafts payable to William E. Lown, Treasurer. Stock certificates will be sent you by return mail. Write your name and address very plainly. Large maps, prospectus, and additional information sent to any address, on application. Address, UNITED STATES TUNNEL, MINING, MILLING, DRAINAGE AND TRANSPORTATION COMPANY, 35 Wall Street, New York City.

# GUAIAQUIN.

**(Guaiacol Bisulphonate of Quinine.)**

---

**A New Quinine Salt for the treatment of Anaemia, Cachexiae, Malaria, and diseases characterized by septic infection or bacterial fermentative disturbances of the Gastro-Intestinal Tract.**

---

**Guaiaquin** is a new chemical compound possessing the characteristic properties of both guaiacol and quinine. It is a ''guaiacolized'' quinine, and is prepared by interaction of guaiacol sulphonic acid and alkaloid quinine; the guaiacol sulphonic acid being prepared by treating pure crystalline guaiacol with concentrated sulphuric acid. It contains 44.26 per cent of alkaloid quinine, combined with 55.74 per cent. of guaiacol sulphonic acid; the latter being equivalent to 33.88 per cent of pure guaiacol.

**Guaiaquin** is an acid salt possessing the formula $(C_6H_4O_2CH_3HSO_3)_2$ $C_{20}H_{24}N_2O_2$ and exists in the form of a yellowish crystalline powder. It is very soluble in water, alcohol and dilute acids, and has a bitter taste. It is oderless, and free from the caustic effects of Guaiacol.

Reports from the Carnegie Laboratory, New York, shows that after extended tests on pathogenic bacteria, Guaiaquin ''possesses antiseptic qualities which compare very favorably with many of the antiseptics now in general use.''

From reports so far to hand, Guaiaquin is indicated in the following affections:

Auto-intoxication, presumably arising from intestinal fermantations, with the formation of toxins acting on the nervous system in general, or on special nerves, or affecting the muscels, viz.: General Neurasthenia, with intestinal dyspepsia, Localized Neuralgias, Facial, Sciatic, Intercostal, etc.

Megalgias or Muscular Rheumatism, with intestinal indigestion. Cephalagia or headache, with gastric and intestinal indigestion of a fermentative variety. All Malarial Manifestations, and Anaemias.

In the above named conditions, Guaiaquin is efficacious, owing to its anti-fermentative and anti-malarial properties.

**Guaiaquin** possesses hygroscopic properties, and consequently should not be dispensed in powder papers, nor in uncoated pills. Gelatine-coated pills containing respectively one, two and three grains of Guaiaquin are prepared by McKesson & Robbins and may be obtained in bottles containing 100 pills.

---

Samples and literature will be sent free on application to

**McKESSON & ROBBINS, New York.**

*12TH YEAR OF.....*

# POLK'S

# MEDICAL AND SURGICAL REGISTER

OF THE UNITED STATES AND CANADA.

**. The Fifth revised edition, to be issued in 1898, will embrace a list of over**

112,000 Physicians, arranged by States, with Post-office Address, School Practiced, and College and Class of Graduation.

1,600 Hospitals and Sanitariums; also a list of Asylums and other Medical Institutions.

All the Existing and Extinct Medical Colleges in the United States and Canada, with Location, Faculty, Etc.

The various Medical Societies and Medical Journals.

Boards of Health. Climatological Statistics.

Synopsis of Laws regulating Practice of Medicine in each State.

Medical Dep'ts U. S. Army, Navy and Marine Hospital Service.

Examining Surgeons of the U. S. Pension Department.

A Descriptive Sketch of each State, Territory and Province.

The Names and Location of Prominent Mineral Springs.

It is the only publication of the kind giving an alphabetical list of all Physicians and a reference to name where it appears with post-office address and college information.

There is no more direct or economical way of reaching the Physicians of the United States and Canada than by an advertisement in the Register, or if you wish to circularize, the Register presents the list in convenient form for addressing.

☞ **Physicians who have not given their names to our canvassers for insertion in the Register are requested to send them to R. L. Polk & Co., Detroit, Mich., immediately.**

## R. L. POLK & CO.,

## PUBLISHERS,

NEW YORK, CHICAGO, BALTIMORE, DETROIT.

# THE IMPROVED "YALE" SURGICAL CHAIR.

## ☞HIGHEST AWARD WORLD'S FAIR, OCT. 4TH, 1893.

*Fig. V—Semi-Reclining.*

1st. Raised by foot and lowered by automatic device.—Fig. I.
2nd. Raising and lowering without revolving the upper part of the chair.—Fig. VII.
3rd. Obtaining height of 39½ inches.—Fig. VII.
4th. As strong in the highest, as when in the lowest p— —Fig. VII.
5th. Raised, lowered, tilted or rotated without ——— patient.
6th. Heavy steel springs to balance the chair.
7th. Arm Rests not dependent on the back for support.—Fig. VII—always ready for use; pushed back when using stirrups—Fig. XVII—may be placed at and away from side of chair, forming a side table for Sim's position.—Fig. XIII.
8th. Quickest and easiest operated and most substantially secured in positions.
9th. The leg and foot rests folded out of the operator's way at any time —Figs. XI, XV and XVII.
10th. Head Rest universal in adjustment, with a range of from 14 inches above seat to 12 inches above back of chair, furnishing a perfect support in Dorsal or Sim's position.—Figs. XIII and XV.
11th. Affording unlimited modifications of positions.
12th. Stability and firmness while being raised and rotated.
13th. Only successful Dorsal position *without moving patient.*
14th. Broad turntable upon which to rotate the chair, which cannot be bent or twisted.
15th. Stands upon its own merits and not upon the reputation of others.

*Fig. XVII—Dorsal Position.*

**Pronounced the *ne plus ultra* by the Surgeon, Gynæcologist, Oculist and Aurist.**

MANUFACTURED EXCLUSIVELY BY

**CANTON SURGICAL AND DENTAL CHAIR CO.,**

38 to 54 East Eighth and 50 to 52 South Walnut Streets, CANTON, OHIO.

---

# HOWARD'S ANTI-RHEUMATIC PLAQUES

FOR THE IMMEDIATE RELIEF AND RAPID CURE OF ALL FORMS OF

# Acute and Chronic Rheumatism, Neuralgia and Gout.

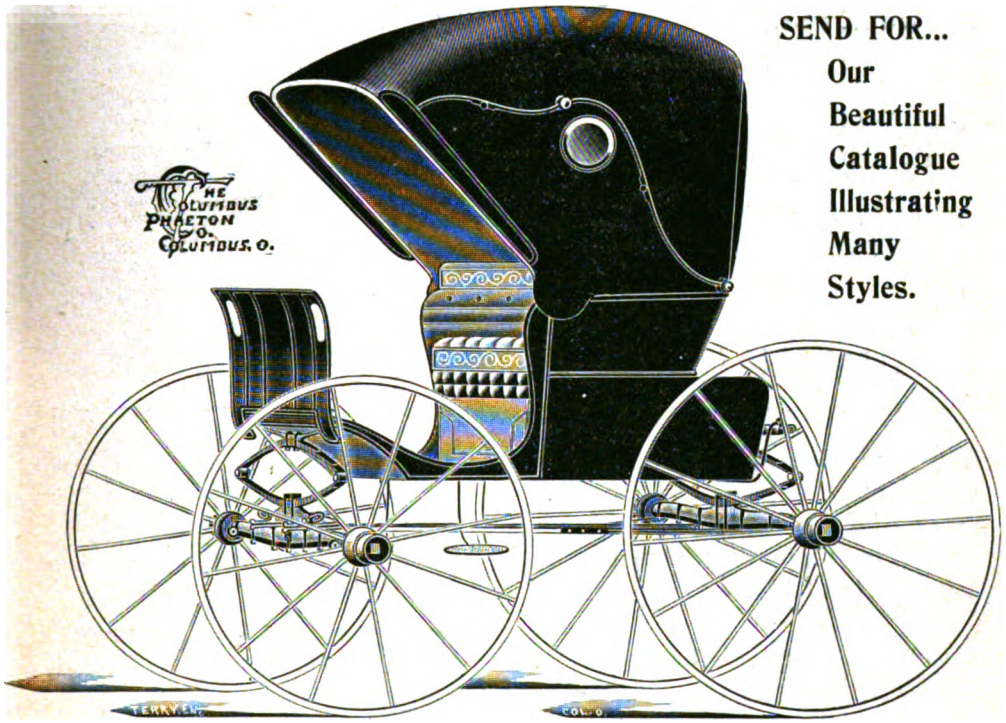
**Each Plaque Contains the Equivalent of:**—Methyl Salicylate, gr. iv; Ext. Leopard's bane, gr. ½; Ext. Rich weed, gr. ½; Tinct. Trailing Sumac, M. ½; Ext. Felon wort, gr. j; Colchicin, gr. $\frac{1}{100}$; Powd. Garget, gr. ½. They contain no opium nor other narcotic. We fill all orders direct. Full particulars concerning administration with each package. Owing to the costliness of some of the ingredients of these Plaques, **No Free Samples** can be furnished. Send a **$1.00** Bill for 100 Doses to the

## HOWARD CHEMICAL CO.,

**1320 to 1328 Washington Av., ST. LOUIS, MO.**

# PHYSICIANS' CARRIAGES

## HAND MADE.

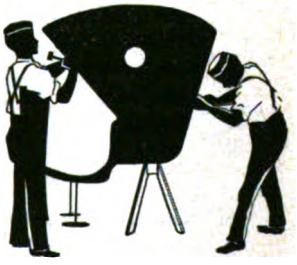



SEND FOR...
Our
Beautiful
Catalogue
Illustrating
Many
Styles.

**OUR PRICES ARE LOWER THAN ANY OTHER FACTORY CAN QUOTE, QUALITY CONSIDERED.**

**We have a Four Months' Price and a Spot Cash Price, and Sell direct to the consumer in places where dealers do not keep our goods.**

**All Vehicles Guaranteed for Two Years.**



**THE COLUMBUS PHAETON CO.,**

**174 to 190 Broad Street, COLUMBUS, OHIO.**

# Hettinger Bros. Mfg. Co.,

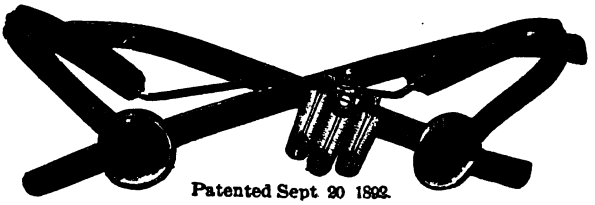
SUCCESSORS TO

Pearson-Allendorph Manufacturing Co.

## Kansas City Dental and Surgical Depot.

918 Walnut St., Kansas City, Mo.

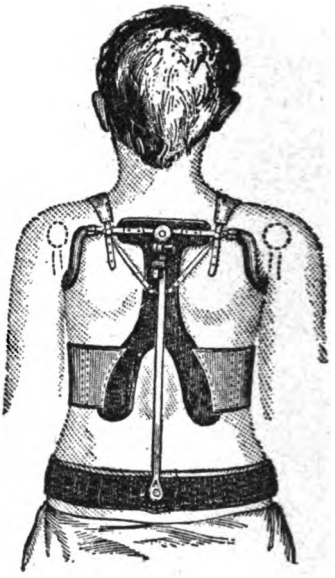
Sole Manufacturers of



Patented Sept 20 1892.

The Dr. Harvey

HUMAN HAND TRUSS.



The Best in the World.

---

## LOUISVILLE SANITARIUM,

2108 W. Walnut St., LOUISVILLE, KY.

FOR THE TREATMENT OF THE

## OPIUM AND MORPHINE HABIT.

SUPPLIED WITH ALL MODERN APPLIANCES.

From a personal knowledge and an examination of facts, we believe that any case of OPIUM or MORPHINE habit can be cured in this institution, no matter how long the drug has been taken, or how much is taken daily, or in what way it is taken, provided the patients are not physical or mental wrecks, and will give their moral support. The treatment has been tested for over two years without a single failure and can be taken with perfect safety to the patient.

SAM COCHRAN, M. D., Louisville, Ky.

*REFER BY PERMISSION TO*

Gen. Basil Duke; Hon. Henry Waterson; Mr. W. N. Haldeman; Senator Wm. Lindsay; Hon. J. C. S Blackburn; German Insurance Bank; and Doctors and Ministers of Louisville generally.

# Syr. Hypophos. Co., Fellows.

**Contains the Essential Elements** of the Animal Oraganization—Potash and Lime;

**The Oxidising Agents**—Iron and Manganese;

**The Tonics**—Quinine and Strychnine;

**And the Vitalizing Constituent**—Phosphorus; the whole combined in the form of a syrup with a **Slightly Alkaline Reaction.**

**It Differs in its Effects from Analogous Preparations;** and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

**It has Gained a Wide Reputation,** particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in the various nervous and debilitating diseases.

**Its Curative Power** is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energies of the system are recruited.

**Its Action is Prompt;** it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

## NOTICE—CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, *finds that no two of them are identical,* and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, *in the property of retaining the strychnine in solution,* and in the medicinal effects.

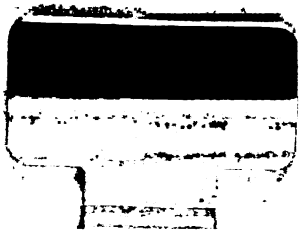
As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. *Fellows.*"

As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear, can then be examined, and the genuineness —or otherwise—of the contents thereby proved.

*Medical Letters may be addressed to*

**Mr. FELLOWS, 48 Vesey St.,**

**NEW YORK.**



# A Pre-Antitoxin Mortality of 40 per cent. Reduced to 3.6 per cent. (with P., D. & Co.'s Antitoxin) . . . . . .

For years the pre-antitoxin mortality at Harper Hospital, Detroit, averaged 40 per cent.

According to the 34th annual report of the hospital authorities (see page 73, *Harper Hospital Bulletin* for February, 1898) the antitoxin treatment of 141 cases during 1897 yields the following showing:

| | Cases | Deaths |
|---|---|---|
| **Ordinary Diphtheria . . . .** | 115 | 1 |
| **Laryngeal Diphtheria . . .** | 26 | 6 |
| | 141 | 7 |
| **Excluding 2 cases moribund on admission . . . . .** | 2 | 2 |
| | 139 | 5 |

**Mortality under antitoxin treatment, 3.6 per cent.**

This very remarkable reduction in the death-rate at Harper Hospital was effected by the exclusive use of Parke, Davis & Co.'s Anti-Diphtheritic Serum—the most concentrated, the most reliable, the most efficient.

**Latest literature mailed upon request.**

## Parke, Davis & Co.,

**Manufacturing Chemists,**

**DETROIT, MICHIGAN.**

Branches:
New York, Kansas City, Baltimore, New Orleans, U. S. A. London, Eng., and Walkerville, Ont.

CHAS. E. BROWN PRINTING CO., KANSAS CITY.